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## SEQUENCE LISTING

<110> diaDexus, Inc. Macina, Roberto Turner, Leah Sun, Yongming

<120> Compositions, Splice Variants and Methods Relating to Breast Specific Genes and Proteins

<130> DEX-0453

<150> US 60/431,145

<151> 2002-12-05

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49

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gtgtcttctt	ccagggcagc	atggtccagt	gagcacatgt	aagtttgggc	agtagatcct	2820
ctgagcctac	tttctcttct	actcagtgag	gatgctgctt	ccttggcagg	tgattgtgat	2880
gtgaagctta	gtaagtcata	gacgtgcagg	tgtctggaga	gtcctgacat	gcagttgtgg	2940
			gcgattttca			3000
			cctgctaaat			3060
			tgtatttcac			3120
			agatctagtt			3180
					cagttccctt	3240
					agccgctagc	3300
					actgcaagtg	3360
					gtgtaaaata	3420
					aataaaatat	3480
attattaaaa						3496

<210> 100

<211> 420 <212> PRT <213> Homo sapien

<400> 100

Met Glu Val Pro Pro Arg Leu Ser His Val Pro Pro Pro Leu Phe Pro

Ser Ala Pro Ala Thr Leu Ala Ser Arg Ser Leu Ser His Trp Arg Pro 25

Arg Pro Pro Arg Gln Leu Ala Pro Leu Leu Pro Ser Leu Ala Pro Ser

Ser Ala Arg Gln Gly Ala Arg Arg Ala Gln Arg His Val Thr Ala Gln 55 ( 60

Gln Pro Ser Arg Leu Ala Gly Gly Ala Ala Ile Lys Gly Gly Arg Arg 70

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Arg Arg Pro Asp Leu Phe Arg Arg His Phe Lys Ser Ser Ser Ile Gln 85 90 95

Arg Ser Ala Ala Ala Ala Ala Thr Arg Thr Ala Arg Gln His Pro
100 105 110

Pro Ala Asp Ser Ser Val Thr Met Glu Asp Met Asn Glu Tyr Ser Asn 115 120 125

Ile Glu Glu Phe Ala Glu Gly Ser Lys Ile Asn Ala Ser Lys Asn Gln 130 135 140

Gln Asp Asp Gly Lys Met Phe Ile Gly Gly Leu Ser Trp Asp Thr Ser 145 150 155 160

Lys Lys Asp Leu Thr Glu Tyr Leu Ser Arg Phe Gly Glu Val Val Asp 165 170 175

Cys Thr Ile Lys Thr Asp Pro Val Thr Gly Arg Ser Arg Gly Phe Gly 180 185 190

Phe Val Leu Phe Lys Asp Ala Ala Ser Val Asp Lys Val Leu Glu Leu 195 200 205

Lys Glu His Lys Leu Asp Gly Lys Leu Ile Asp Pro Lys Arg Ala Lys 210 215 220

Ala Leu Lys Gly Lys Glu Pro Pro Lys Lys Val Phe Val Gly Gly Leu 225 230 235 240

Ser Pro Asp Thr Ser Glu Glu Gln Ile Lys Glu Tyr Phe Gly Ala Phe 245 250 255

Gly Glu Ile Glu Asn Ile Glu Leu Pro Met Asp Thr Lys Thr Asn Glu 260 265 270

Arg Arg Gly Phe Cys Phe Ile Thr Tyr Thr Asp Glu Glu Pro Val Lys 275 280 285

Lys Leu Leu Glu Ser Arg Tyr His Gln Ile Gly Ser Gly Lys Cys Glu 290 295 300

Ile Lys Val Ala Gln Pro Lys Glu Val Tyr Arg Gln Gln Gln Gln 305 310 315 320

Gln Lys Gly Gly Arg Gly Ala Ala Gly Gly Arg Gly Gly Thr Arg

335 330 325

Gly Arg Gly Arg Gly Gln Gly Gln Asn Trp Asn Gln Gly Phe Asn Asn 345

Tyr Tyr Asp Gln Gly Tyr Gly Asn Tyr Asn Ser Ala Tyr Gly Gly Asp

Gln Asn Tyr Ser Gly Tyr Gly Gly Tyr Asp Tyr Thr Gly Tyr Asn Tyr 375 380

Gly Asn Tyr Gly Tyr Gly Gln Gly Tyr Ala Asp Tyr Ser Gly Gln Gln 390

Ser Thr Tyr Gly Lys Ala Ser Arg Gly Gly Asn His Gln Asn Asn 410 405

Tyr Gln Pro Tyr 420

<210> 101 <211> 100

<212> PRT

<213> Homo sapien

<400> 101

Arg Gly Val Leu Glu Asp Pro Ser Arg Pro Cys His Lys Leu Gln Gln 10 5

Gln Gln Gln Lys Gly Gly Arg Gly Ala Ala Ala Gly Gly Arg Gly 25 20

Gly Thr Arg Gly Arg Gly Arg Gly Gln Gly Gln Asn Trp Asn Gln Gly 35 ·

Phe Asn Asn Tyr Tyr Asp Gln Gly Tyr Gly Asn Tyr Asn Ser Ala Tyr 50

Gly Gly Asp Gln Asn Tyr Ser Gly Tyr Gly Gly Tyr Asp Tyr Thr Gly

Tyr Asn Tyr Gly Asn Tyr Gly Tyr Gly Gln Gly Tyr Ala Asp Tyr Ser 90 85

Gly Lys Asn Ile 100

<210> 102 <211> 104 <212> PRT <213> Homo sapien

<400> 102

Arg Gly Val Leu Glu Asp Pro His Ala His Val Thr Ser Cys Ser Asn

Ser Asn Asn Lys Lys Val Glu Val Leu Gln Leu Val Asp Glu Val

Val Arg Gly Val Val Ala Glu Val Arg Ala Lys Thr Gly Thr Lys Asp

Leu Ile Thr Ile Met Ile Lys Asp Met Glu Ile Thr Ile Val Pro Met

Val Val Ile Lys Thr Ile Val Ala Met Ala Asp Met Ile Ile Leu Gly 70

Ile Thr Met Gly Thr Met Asp Met Asp Arg Asp Met Gln Thr Thr Val

Val Arg Ile Phe Asn Leu Ile Leu

<210> 103

<211> 36 <212> PRT

<213> Homo sapien

<400> 103

Gly Arg Leu Leu Leu Leu Leu Glu Phe Lys Leu Leu Thr Met Tyr

Gly Leu Met Pro Gly Lys Cys Cys Gly Gly Gly Ser Gln Glu Asp Trp

Pro Arg Glu Pro 35

<210> 104

<211> 38

<212> PRT

<213> Homo sapien

<400> 104

121

Arg Pro Pro Thr Thr Thr Ala Arg Ile Gln Ala Ser Asn Asp Val

Arg Ala His Ala Trp Glu Val Leu Trp Trp Gly Leu Pro Gly Gly Leu 25

Ala Gln Arg Ala Leu Arg 35

<210> 105

<211> 77 <212> PRT <213> Homo sapien

<400> 105

Met Asp Ala Trp Ser Arg Pro Arg Tyr Val Gln Met Thr Lys Ser Leu

Gln Cys Leu Gln Val Gln Thr Glu Leu Lys Glu Cys Met Val Val Lys 25

Thr Tyr Leu Ile Ser Ser Ile Pro Leu Gln Gly Ala Phe Asn Tyr Lys

Tyr Thr Ala Cys Leu Cys Asp Asp Asn Pro Lys Thr Phe Tyr Val Gly 60 55

Leu Leu His Gln Gln Asn Cys Ala Asn Cys Ser Arg Arg 70

<210> 106

<211> 121

<212> PRT

<213> Homo sapien

.

<400> 106

Asn Trp Val Leu Met Leu Leu Glu Arg Arg Gln Cys Asp Gly Cys Val

Val Ala Ala Glu Val Arg Pro Asn Asp Glu Val Thr Ala Val Leu Ala 25

Val Gln Thr Glu Leu Lys Glu Cys Met Val Val Lys Thr Tyr Leu Ile 40 35

Ser Ser Ile Pro Leu Gln Gly Ala Phe Asn Tyr Lys Tyr Thr Ala Cys 55 50

122

Leu Cys Asp Asp Asn Pro Lys Thr Phe Tyr Trp Asp Phe Tyr Thr Asn

Arg Thr Val Gln Ile Ala Ala Val Val Asp Val Ile Arg Glu Leu Gly

Ile Cys Pro Asp Asp Ala Ala Val Ile Pro Ile Lys Asn Asn Arg Phe

Tyr Thr Ile Glu Ile Leu Lys Val Glu

<210> 107

<211> 66

<212> PRT

<213> Homo sapien

<400> 107

Met Asp Glu Arg Pro Pro Ala Gln Val Val Gln Thr Glu Leu Lys Glu 10

Cys Met Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro Leu Gln Gly

Ala Phe Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp Asn Pro Lys

Thr Phe Tyr Val Gly Leu Leu His Gln Gln Asn Cys Ala Asn Cys Ser

Arg Arg 65

<210> 108 <211> 97

<212> PRT

<213> Homo sapien

<400> 108

Trp Met Ser Gly Arg Arg Ala Gly Val Gln Thr Glu Leu Lys Glu Cys

Met Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro Leu Gln Gly Ala 20 25

Phe Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp Asn Pro Lys Thr

45 40 35

Phe Tyr Trp Asp Phe Tyr Thr Asn Arg Thr Val Gln Ile Ala Ala Val 55

Val Asp Val Ile Arg Glu Leu Gly Ile Cys Pro Asp Asp Ala Ala Val 70

Ile Pro Ile Lys Asn Asn Arg Phe Tyr Thr Ile Glu Ile Leu Lys Val 90

Glu

<210> 109

<211> 155

<212> PRT

<213> Homo sapien

<400> 109

Met Leu Leu Pro Asn Lys Lys Lys His Asn Thr Thr Lys Thr Lys Asn

Asn Lys Pro Pro Gly Gly Asn Pro Gly Pro His Thr Arg Gly Pro Arg 25

Gly Trp Arg Asn Val Gly Leu Pro Ala His Gln Thr Pro Thr Gln Gln 40 35

Phe Ala Gly Lys Pro Pro Pro Pro Pro Ala His Pro Pro Pro Pro Ala 50 55

Lys Arg Thr His Lys Arg Arg Pro Arg Gly Thr Arg Asp Thr Arg 70 65

Arg Glu Ala Glu Pro Thr Gly Pro Arg Arg Glu Gln Asp Thr Glu Arg

Arg Lys Arg Asp Arg Gly Cys Arg His Ala Ser Ser Thr Ala Gln Arg 105

Pro Gly Ala Gly His Pro Glu Ala Gly Thr Glu Gln Gln Pro Gln Asp 115

Ala Ala Asp Pro Arg Glu Arg Gly Ala Asp Arg Asn Gln Thr Arg Gly 135

Pro Ala Thr Arg Gly Ala Ala Lys Thr Ser Gly 145 150

<210> 110 <211> 172 <212> PRT <213> Homo sapien

<400> 110

Arg Asn Leu Ala Gly Ile Ser Ala Val Val Tyr Lys Ile Asn Phe Leu 10

Thr Cys Phe Ser Leu Thr Lys Lys Asn Thr Thr Gln Gln Lys Gln Lys

Thr Thr Asn Arg Leu Gly Ala Thr Pro Gly His Thr Arg Ala Asp Pro

Ala Gly Gly Glu Thr Trp Ala Ser Arg Pro Thr Lys Pro Pro His Asn 55

Asn Ser Arg Ala Asn Pro Pro Pro Pro Pro His Thr His Pro Pro Arg

Pro Lys Glu Pro Thr Ser Gly Gly Asp Arg Glu Gly Arg Glu Thr Pro 90

Asp Ala Arg Gln Ser Gln Arg Ala Gln Gly Gly Ser Lys Thr Pro Ser 100

Gly Gly Asn Gly Thr Glu Ala Ala Gly Met Pro Ala Ala Arg Arg Arg 115

Gly Gln Gly Arg Gly Thr Arg Arg Pro Gly Arg Ser Ser Arg Arg 135 130

Thr Gln Arg Thr Pro Gly Ser Glu Ala Pro Thr Ala Thr Lys Arg Gly 145

Asp Pro Pro His Ala Gly Arg Pro Arg Gln Ala Ala 170

<210> 111

<211> 44

<212> PRT

<213> Homo sapien

125

<400> 111

Met Leu Leu Glu Arg Arg Gln Cys Asp Gly Cys Val Val Ala Ala Glu

Arg Gln Ser Lys Asn Leu Leu Arg Gly Thr Phe Thr Pro Thr Glu Leu

Cys Lys Leu Gln Pro Ser Leu Met Leu Phe Gly Asn

<210> 112

<211> 72 <212> PRT <213> Homo sapien

<400> 112

Asn Lys Leu Leu Asn Met Leu Leu Gln Lys Lys Thr Lys Lys Gln Lys

Lys Lys Glu Ser Gly Gly Val His Pro Trp Ala Ile Arg Cys Gly Val

Pro Trp Cys Val Glu Phe Gly Ser Pro Gly Pro Gln Phe Pro Asn Asn

Asn Phe Thr Glu Gln Gly Gln Arg Lys Thr Thr Ser Thr Lys Lys Pro

Asn Pro Thr His Lys Glu Thr Arg

<210> 113

<211> 192

<212> PRT

<213> Homo sapien

<400> 113

Met Pro Val Trp Pro Leu Asp Trp Leu Gly Arg Val Ala Gly Ala Lys 5

Val Leu Trp Ala Ile His Phe Ile Gln Ala Gly Leu Leu Ser Ala Leu

Gly Ser Leu Ile Leu Met Ile Trp Leu Met Ala Thr Pro His Ser His 40 35

Glu Thr Glu Gln Lys Arg Leu Gly Leu Leu Ala Gly Phe Ala Phe Leu

126

60 55 50

Thr Gly Val Gly Leu Gly Pro Ala Leu Glu Phe Cys Ile Ala Val Asn

Pro Ser Ile Leu Pro Thr Ala Phe Met Gly Thr Ala Met Ile Phe Thr

Cys Phe Thr Leu Ser Ala Leu Tyr Ala Arg Arg Arg Ser Tyr Leu Phe 110 105

Leu Gly Gly Ile Leu Met Ser Ala Leu Ser Leu Leu Leu Ser Ser 115

Leu Gly Asn Val Phe Phe Gly Ser Ile Trp Leu Phe Gln Ala Asn Leu 135 130

Tyr Val Gly Leu Val Val Met Cys Gly Phe Val Leu Phe Asp Thr Gln 155 150 145

Leu Ile Ile Glu Lys Ala Glu His Gly Asp Gln Asp Tyr Ile Trp His 165

Cys Ile Asp Leu Phe Leu Asp Phe Ile Thr Gly Leu Gln Lys Asn Ser 185

<210> 114 <211> 210 <212> PRT

<213> Homo sapien

Arg Gly Tyr Met Pro Val Trp Pro Leu Asp Trp Leu Gly Arg Val Ala

Gly Ala Lys Val Leu Trp Ala Ile His Phe Ile Gln Ala Gly Leu Leu 20

Ser Ala Leu Gly Ser Leu Ile Leu Met Ile Trp Leu Met Ala Thr Pro 35

His Ser His Glu Thr Glu Gln Lys Arg Leu Gly Leu Leu Ala Gly Phe 50

Ala Phe Leu Thr Gly Val Gly Leu Gly Pro Ala Leu Glu Phe Cys Ile 65 70

127

Ala Val Asn Pro Ser Ile Leu Pro Thr Ala Phe Met Gly Thr Ala Met

Ile Phe Thr Cys Phe Thr Leu Ser Ala Leu Tyr Ala Arg Arg Arg Ser 105

Tyr Leu Phe Leu Gly Gly Ile Leu Met Ser Ala Leu Ser Leu Leu Leu

Leu Ser Ser Leu Gly Asn Val Phe Phe Gly Ser Ile Trp Leu Phe Gln

Ala Asn Leu Tyr Val Gly Leu Val Val Met Cys Gly Phe Val Leu Phe 155 150 145

Asp Thr Gln Leu Ile Ile Glu Lys Ala Glu His Gly Asp Gln Asp Tyr 165

Ile Trp His Cys Ile Asp Leu Phe Leu Asp Phe Ile Thr Val Phe Arg 185 180

Lys Leu Met Met Ile Leu Ala Met Asn Glu Lys Asp Lys Lys Glu 200

Lys Lys 210

<210> 115 <211> 90

<212> PRT

<213> Homo sapien

Met His Ala Tyr Ser Cys Ala Leu Leu Ser Gly Glu Leu Arg Ile Arg

Leu Leu Arg Arg Lys Asn Leu Asn Ile Asn Arg Lys Ser Trp Arg Lys 20

Phe Ala Thr Pro Ser Ser Pro Ser Cys Thr Arg Val Gln Glu Ala Cys 35

Gln Glu Glu Cys Leu Gly Asp Phe Leu Val Val Glu Leu Leu Pro Leu 55 50

Val Val Leu Pro Gln Gly Pro Pro Leu Lys Arg Leu Ile Lys Pro Thr

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65 70 75 80 ·

Lys Cys Arg Cys Ser Ile Val Pro His Ile 85 90

<210> 116

<211> 244

<212> PRT

<213> Homo sapien

<400> 116

Ser Asn Ala Cys Ser Ser Gly Ala Ser Cys Asp Gly Cys Gly Arg Pro 1 5 10 15

Gly Arg Tyr Ala Val Arg Thr Tyr Gly Arg Glu Ile Gln Val Thr Glu 20 25 30

Leu Leu Asp Lys Leu Asp Phe Tyr Val Leu Pro Val Leu Asn Ile Asp 35 40 45

Gly Tyr Ile Tyr Thr Trp Thr Lys Ser Arg Phe Trp Arg Lys Thr Arg 50 55 60

Ser Thr His Thr Gly Ser Ser Cys Ile Gly Thr Asp Pro Asn Arg Asn 65 70 75 80

Phe Asp Ala Gly Trp Cys Glu Ile Gly Ala Ser Arg Asn Pro Cys Asp 85 90 95

Glu Thr Tyr Cys Gly Pro Ala Ala Glu Ser Glu Lys Glu Thr Lys Ala 100 105 110

Leu Ala Asp Phe Ile Arg Asn Lys Leu Ser Ser Ile Lys Ala Tyr Leu 115 120 125

Thr Ile His Ser Tyr Ser Gln Met Met Ile Tyr Pro Tyr Ser Tyr Ala 130 135 140

Tyr Lys Leu Gly Glu Asn Asn Ala Glu Leu Asn Ala Leu Ala Lys Ala 145 150 155 160

Thr Val Lys Glu Leu Ala Ser Leu His Gly Thr Lys Tyr Thr Tyr Gly
165 170 175

Pro Gly Ala Thr Thr Ile Tyr Pro Ala Ala Gly Gly Ser Asp Asp Trp
180 185 190

Ala Tyr Asp Gln Gly Ile Arg Tyr Ser Phe Thr Phe Glu Leu Arg Asp 200

Thr Gly Arg Tyr Gly Phe Leu Leu Pro Glu Ser Gln Ile Arg Ala Thr 215

Cys Glu Glu Thr Phe Leu Ala Ile Lys Tyr Val Ala Ser Tyr Val Leu 225 230

Glu His Leu Tyr

<210> 117 <211> 67 <212> PRT <213> Homo sapien

<400> 117

Met Leu Glu Arg Arg Ser Val Met Asp Ala Trp Ser Arg Pro Gly Thr

Val Ala Leu Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu

Ile Arg Lys Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp 35 40

Phe Lys Thr Asp Leu Arg Phe Gln Ser Ala Ala Ile Arg Cys Phe Ala 50 . 55

Gly Gly Lys

65

<210> 118

<211> 106 <212> PRT <213> Homo sapien

<400> 118

Met Leu Glu Arg Arg Ser Val Met Asp Ala Trp Ser Arg Pro Gly Thr 10

Val Ala Leu Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu 20 25

Ile Arg Lys Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp 35

Phe Lys Thr Asp Leu Arg Phe Gln Ser Ala Ala Ile Gly Ala Leu Gln 50

Glu Ala Ser Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn Leu 70

Cys Ala Ile His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile Gln

Leu Ala Arg Arg Ile Arg Gly Glu Arg Ala

<210> 119 <211> 257

<212> PRT

<213> Homo sapien

<400> 119

Met Ile Asn Leu Arg Glu Asn Ile Ser Leu Ser Ile His His Arg Ala

Lys Tyr Lys Ala Leu Ser Ser Thr Leu Tyr Thr Ser Ser His Gln Lys 20

Gln Ile Ser Ser Leu Arg Asp Glu Val Glu Ala Lys Ala Lys Leu Ile

Thr Asp Leu Gln Asp Gln Asn Gln Lys Met Met Leu Glu Gln Glu Arg

Leu Arg Val Glu His Glu Lys Leu Lys Ala Thr Asp Gln Glu Lys Ser

Arg Lys Leu His Glu Leu Thr Val Met Gln Asp Arg Arg Glu Gln Ala

Arg Gln Asp Leu Lys Gly Leu Glu Glu Thr Val Ser Ala Glu Ile Asp 105

Ser Asp Asp Thr Gly Gly Ser Ala Ala Gln Lys Gln Lys Ile Ser Phe

Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val 130 135

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Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg 145 150 155 160

Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys
165 170 175

Glu Ala Lys Glu Asn Ala Ser Arg Asp Arg Lys Arg Tyr Gln Glu 180 185 190

Val Asp Arg Ile Lys Glu Ala Val Arg Ser Lys Asn Met Ala Arg Arg 195 200 205

Gly His Ser Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly Gln His Pro 210 215 220

Ala Ala Ser Pro Thr His Pro Ser Ala Ile Arg Gly Gly Ala Phe 225 230 235 240

Val Gln Asn Ser Gln Pro Val Ala Val Arg Gly Gly Gly Gly Lys Gln 245 250 255

Val

<210> 120

<211> 190

<212> PRT

<213> Homo sapien

<400> 120

Thr Leu Tyr Thr Ser Lys Gln Glu Thr Glu Glu Gly Gly Arg Asp Arg

Ala Lys Glu Leu Gln Thr Leu His Asn Leu Arg Lys Leu Phe Val Gln 20 25 30

Asp Leu Ala Thr Arg Val Lys Lys Ser Ala Glu Ile Asp Ser Asp Asp 35 40 45

Thr Gly Gly Ser Ala Ala Gln Lys Gln Lys Ile Ser Phe Leu Glu Asn 50 55 60

Asn Leu Glu Gln Leu Thr Lys Val His Lys Gln Leu Val Arg Asp Asn 65 70 75 80

Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu Glu Lys Arg Leu Arg Ala 85 90 95

Thr Ala Glu Arg Val Lys Ala Leu Glu Ser Ala Leu Lys Glu Ala Lys 105

Glu Asn Ala Ser Arg Asp Arg Lys Arg Tyr Gln Gln Glu Val Asp Arg 120

Ile Lys Glu Ala Val Arg Ser Lys Asn Met Ala Arg Arg Gly His Ser

Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly Gln His Pro Ala Ala Ser 150 155

Pro Thr His Pro Ser Ala Ile Arg Gly Gly Ala Phe Val Gln Asn

Ser Gln Pro Val Ala Val Arg Gly Gly Gly Lys Gln Val

<210> 121

<211> 180

<212> PRT

<213> Homo sapien

<220>

<221> MISC\_FEATURE

<222> (2)..(2) <223> X=any amino acid

<400> 121

Arg Xaa Gly Arg Asp Arg Ala Lys Glu Leu Gln Thr Leu His Asn Leu

Arg Lys Leu Phe Val Gln Asp Leu Ala Thr Arg Val Lys Lys Ser Ala

Glu Ile Asp Ser Asp Asp Thr Gly Gly Ser Ala Ala Gln Lys Gln Lys

Ile Ser Phe Leu Glu Asn Asn Leu Glu Gln Leu Thr Lys Val His Lys

Gln Leu Val Arg Asp Asn Ala Asp Leu Arg Cys Glu Leu Pro Lys Leu 70 75

Glu Lys Arg Leu Arg Ala Thr Ala Glu Arg Val Lys Ala Leu Glu Ser 85 90

133

Ala Leu Lys Glu Ala Lys Glu Asn Ala Ser Arg Asp Arg Lys Arg Tyr

Gln Gln Glu Val Asp Arg Ile Lys Glu Ala Val Arg Ser Lys Asn Met 115 120

Ala Arg Arg Gly His Ser Ala Gln Ile Ala Lys Pro Ile Arg Pro Gly

Gln His Pro Ala Ala Ser Pro Thr His Pro Ser Ala Ile Arg Gly Gly 150 155

Gly Ala Phe Val Gln Asn Ser Gln Pro Val Ala Val Arg Gly Gly

Gly Lys Gln Val

<210> 122 <211> 103

<212> PRT

<213> Homo sapien

<400> 122

Met Ala Leu Arg Thr Ala Thr Ser Trp Asp Gly Thr Ala Gly Pro Arg

Arg Ser Ala Arg Gly Glu Ala Arg Gly Pro Arg Ala Ala Leu Gly

Arg Arg Gly Arg Pro Glu Pro Glu Ala Thr Pro Ala Trp Arg Val Pro

Ala Gly Arg Arg Gly Leu Ser Gly Gly Trp Arg Ala Ala Ser Pro Cys

Thr Ala Pro Gly Arg Ser Cys Trp Gly Arg Arg Ala Ser Arg Ala Leu

Pro Pro Pro Pro Leu Leu Pro Leu Leu Gly Trp Ser Arg Ala Ala

Trp Ala Arg Ala Arg Trp Pro 100

<210> 123

<211> 126 <212> PRT <213> Homo sapien

<400> 123

Lys Ala Leu Leu Gly Leu Pro Leu Gly Ser Ala Cys Arg Ala Gly Pro

Thr Ala Pro Gly Ser Glu Pro Trp Arg Ser Gly Arg Pro Leu Pro Gly

Thr Gly Arg Pro Gly Arg Asp Asp Pro Arg Gly Ala Ala Arg Pro Ala 40

Gly Arg Ala Gln Pro Ser Gly Gly Ala Gly Arg Ser Pro Arg Pro 50

Pro Gln Pro Gly Gly Ser Arg Pro Gly Gly Gly Ser Ala Ala Gly

Gly Gly Pro Arg Leu His Ala Arg Arg Gln Gly Gly Ala Ala Gly Gly

Ala Gly Pro Arg Ala His Cys Arg Arg Arg Cys Cys Arg Tyr Cys

Trp Ala Gly Ala Gly Arg Pro Gly Pro Ala Arg Ala Gly Arg 120

<210> 124

<211> 55

<212> PRT

<213> Homo sapien

<400> 124

Met Ala Thr Lys Ala Val Cys Val Leu Lys Gly Asp Gly Pro Val Gln

Gly Ile Ile Asn Phe Glu Gln Lys Ala Val Pro Val Gln Val Leu Thr

Leu Ile Leu Tyr Pro Glu Asn Thr Val Gly Gln Arg Met Lys Arg Gly 40

Met Leu Glu Thr Trp Ala Met 50

135

<210> 125 <211> 155 <212> PRT <213> Homo sapien

<400> 125

Ser Arg Arg Arg Gly Ala Gly Leu Arg Arg Ser Leu Leu Gln Arg Leu

Gly Phe Pro Leu Gln Ser Ser Glu Pro Gly Pro Arg Arg Gly Leu Ala

Ser Tyr Gly Asp Glu Gly Arg Val Arg Ala Glu Gly Arg Arg Pro Ser

Ala Gly His His Gln Phe Arg Ala Glu Gly Cys Thr Ser Ala Gly Pro

His Phe Asn Pro Leu Ser Arg Lys His Gly Gly Pro Lys Asp Glu Glu

Arg His Val Gly Asp Leu Gly Asn Val Thr Ala Asp Lys Asp Gly Val 85

Ala Asp Val Ser Ile Glu Asp Ser Val Ile Ser Leu Ser Gly Asp His

Cys Ile Ile Gly Arg Thr Leu Val Val His Glu Lys Ala Asp Asp Leu 115 120

Gly Lys Gly Gly Asn Glu Glu Ser Thr Lys Thr Gly Asn Ala Gly Ser 130

Arg Leu Ala Cys Gly Val Ile Gly Ile Ala Gln 145 150

<210> 126

<211> 151

<212> PRT

<213> Homo sapien

Met Asp Gln Asp Gly Glu Ile Glu Asp Ser Thr Asn His Pro Leu His

Thr Asn Thr Asn Leu Thr Thr Ile Tyr Met His Thr His Lys Ser Phe 20 25

Ile Asn Leu Thr Thr Ile Tyr Met His Thr His Lys Thr Phe Val Arg

Thr Gln Asn Gln Ile Lys Lys Lys Gln Gln Asp Val Leu Gly Phe Leu

Glu Ala Asn Lys Ile Gly Phe Glu Glu Lys Asp Ile Ala Ala Asn Glu

Glu Asn Arg Lys Trp Met Arg Glu Asn Val Pro Glu Asn Ser Arg Pro

Ala Thr Gly Tyr Pro Leu Pro Pro Gln Ile Phe Asn Glu Ser Gln Tyr

Arg Gly Asp Tyr Asp Ala Phe Phe Glu Ala Arg Glu Asn Asn Ala Val

Tyr Ala Phe Leu Gly Leu Thr Ala Pro Pro Gly Ser Lys Glu Ala Glu 135

Val Gln Ala Lys Gln Gln Ala

<210> 127

<211> 416 <212> PRT <213> Homo sapien

<400> 127

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Ala Val

Ser Cys Ala Val Ala Gln His Ala Pro Pro Val Ser Gly Leu Ser Arg

Gly Ala Glu Arg Gly Val Gln Val Arg Ala Arg Met Glu Ala Gln Trp

Thr Glu Asp Cys Arg Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr

Arg Gly Ala Val Pro Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr 70

Lys Arg Trp His Glu Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val 85 90 95

Ile Val Asn Ser Leu Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly
100 105 110

Lys Val Met Gln Val Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn 115 120 125

Phe Pro Gly Pro Phe Glu Glu Met Lys Gly Ile Ala Ala Val Thr 130 135 140

Asp Ile Pro Leu Gly Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu 145 150 155 160

Phe Thr Ile Cys Thr Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu 165 170 175

Ile His Gly Arg Asn Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile 180 185 190

Asn Asn Asp Thr Trp Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val

Asn Leu Asp Phe Gln Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser 210 215 220

Phe Ala Gly Tyr Val Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe 225 230 235 240

Ser Leu Thr Leu Asn Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Gly 245 250 255

Ile Leu Glu Trp Ile Leu Gly Lys Lys Asp Ala Met Trp Ile Gly Phe 260 265 270

Leu Thr Arg Thr Val Leu Glu Asn Ser Thr Ser Tyr Glu Glu Ala Lys 275 280 285

Asn Leu Leu Thr Lys Thr Lys Ile Leu Ala Pro Ala Tyr Phe Ile Leu 290 295 300

Gly Gly Asn Gln Ser Gly Glu Gly Cys Val Ile Thr Arg Asp Arg Lys 305 310 315 320

Glu Ser Leu Asp Val Tyr Glu Leu Asp Ala Lys Gln Gly Arg Trp Tyr

138

330 · 335 325

Val Val Gln Thr Asn Tyr Asp Arg Trp Lys His Pro Phe Phe Leu Asp 345

Asp Arg Arg Thr Pro Ala Lys Met Cys Leu Asn Arg Thr Ser Gln Glu 360

Asn Ile Ser Phe Glu Thr Met Tyr Asp Val Leu Ser Thr Lys Pro Val

Leu Asn Lys Leu Thr Val Tyr Thr Thr Leu Ile Asp Val Thr Lys Gly 390 395

Gln Phe Glu Thr Tyr Leu Arg Asp Cys Pro Asp Pro Cys Ile Gly Trp 405 410

<210> 128

<211> 389 <212> PRT <213> Homo sapien

<400> 128

Val Ser Leu Ser Arg Gly Ala Glu Arg Gly Val Gln Val Arg Ala Arg

Met Glu Ala Gln Trp Thr Glu Asp Cys Arg Lys Ser Thr Tyr Pro Pro 25

Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro Trp Tyr Thr Ile Asn Leu 45 35 40

Asp Leu Pro Pro Tyr Lys Arg Trp His Glu Leu Met Leu Asp Lys Ala 50 55

Pro Val Leu Lys Val Ile Val Asn Ser Leu Lys Asn Met Ile Asn Thr 70

Phe Val Pro Ser Gly Lys Val Met Gln Val Val Asp Glu Lys Leu Pro

Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe Glu Glu Glu Met Lys Gly

Ile Ala Ala Val Thr Asp Ile Pro Leu Gly Glu Ile Ile Ser Phe Asn 120 125 115

Il€	Phe 130	Tyr	Glu	Leu	Phe	Thr 135	Ile	Сув	Thr	Ser	Ile 140	Val	Ala	Glu	Asp
Lys 145	Lys	Gly	His	Leu	Ile 150	His	Gly	Arg	Asn	Met 155	Asp	Phe	Gly	Val	Phe 160
Let	ı Gly	Trp	Asn	Ile 165	Asn	Asn	Asp	Thr	Trp 170	Val	Ile	Thr	Glu	Gln 175	Leu
Lyi	s Pro	Leu	Thr 180	Val	Asn	Leu	Asp	Phe 185	Gln	Arg	Asn	Asn	Lys 190	Thr	Val
Pho	e Lys	Ala 195	Ser	Ser	Phe	Ala	Gly 200	Tyr	Val	Gly	Met	Leu 205	Thr	Gly	Phe
Ly	s Pro 210	_	Leu	Phe	Ser	Leu 215	Thr	Leu	Asn	Glu	Arg 220	Phe	Ser	Ile	Asn
G1; 22	y Gly 5	Tyr	Leu	Gly	Ile 230	Leu	Glu	Trp	Ile	Leu 235	Gly	Lys	Lys	Asp	Ala 240
Ме	t Trp	Ile	Gly	Phe 245	Leu	Thr	Arg	Thr	Val 250	Leu	Glu	Asn	Ser	Thr 255	Ser
ту	r Glu	Glu	Ala 260		Asn	Leu	Leu	Thr 265	Lys	Thr	Lys	Ile	Leu 270	Ala	Pro
Al	a Tyr	Phe 275		Leu	Gly	Gly	Asn 280	Gln	Ser	Gly	Glu	Gly 285	Сув	Val	Ile
Th	r Arg 290		Arg	Lys	Glu	Ser 295		Asp	Val	Tyr	Glu 300	Leu	Asp	Ala	Lys
G1 30	n Gly 5	/ Arg	Trp	Tyr	Val 310		Gln	Thr	Asn	Tyr 315		Arg	Trp	Lys	His 320
Pr	o Phe	e Phe	e Leu	Asp 325		Arg	Arg	Thr	330		. Lys	Met	. Сув	1 Leu 335	Asn
Ar	g Thi	r Ser	Gln 340		. Asn	Ile	Ser	Phe		Thr	Met	Туг	Asp 350		Leu

Ser Thr Lys Pro Val Leu Asn Lys Leu Thr Val Tyr Thr Thr Leu Ile 355 360 365

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140

Asp Val Thr Lys Gly Gln Phe Glu Thr Tyr Leu Arg Asp Cys Pro Asp 370 375 380

Pro Cys Ile Gly Trp 385

<210> 129

<211> 360

<212> PRT

<213> Homo sapien

<400> 129

Met Leu Ile Asn Ile Leu Asp Val Met Leu Glu Asn Asn Cys Asn Leu 1 5 10 15

Pro Arg Cys Ser Ala Arg Pro Lys Ala Ala Ser Leu Val Thr Cys Phe 20 25 30

Ile Leu Ser Leu Glu Ser Pro Gly Trp Gly Arg Lys Pro Pro Pro Ala 35 40 45

Gly Arg Ser Ser Thr Ala Pro Leu Ala Lys Ala His Thr His Thr Met 50 55 60

Lys Thr Leu Lys Leu Phe Leu Lys Thr Asn Phe Ser Pro Ile Val Met 65 70 75 80

Val Leu Tyr Ile Asn Thr Lys Phe Ser Phe Leu Ile Gly Glu Ile Ile 85 90 95

Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr Ser Ile Val 100 105 110

Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg Asn Met Asp Phe 115 120 125

Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr Trp Val Ile Thr 130 135 140

Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe Gln Arg Asn Asn 145 150 155 160

Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly Tyr Val Gly Met Leu 165 170 175

Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr Leu Asn Glu Arg Phe 180 185 190

Ser Ile Asn Gly Gly Tyr Leu Gly Ile Leu Glu Trp Ile Leu Gly Lys 195 200 205

Lys Asp Ala Met Trp Ile Gly Phe Leu Thr Arg Thr Val Leu Glu Asn 210 215 220

Ser Thr Ser Tyr Glu Glu Ala Lys Asn Leu Leu Thr Lys Thr Lys Ile 225 230 235 240

Leu Ala Pro Ala Tyr Phe Ile Leu Gly Gly Asn Gln Ser Gly Glu Gly 245 250 255

Cys Val Ile Thr Arg Asp Arg Lys Glu Ser Leu Asp Val Tyr Glu Leu 260 265 270

Asp Ala Lys Gln Gly Arg Trp Tyr Val Val Gln Thr Asn Tyr Asp Arg 275 280 285

Trp Lys His Pro Phe Phe Leu Asp Asp Arg Arg Thr Pro Ala Lys Met 290 295 300

Cys Leu Asn Arg Thr Ser Gln Glu Asn Ile Ser Phe Glu Thr Met Tyr 305 310 315 320

Asp Val Leu Ser Thr Lys Pro Val Leu Asn Lys Leu Thr Val Tyr Thr 325 330 335

Thr Leu Ile Asp Val Thr Lys Gly Gln Phe Glu Thr Tyr Leu Arg Asp 340 345 350

Cys Pro Asp Pro Cys Ile Gly Trp 355 360

<210> 130

<211> 253

<212> PRT

<213> Homo sapien

<400> 130

Met Pro Gly Pro His His His Val Asp His Tyr Tyr His Cys Val Ser

1 10 15

Glu Met Ser Leu Lys His Val Phe Tyr Arg Trp Asn Ile Asn Asn Asp 20 25 30

142

Thr Trp Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp

Phe Gln Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly

Tyr Val Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr

Leu Asn Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Gly Ile Leu Glu

Trp Ile Leu Gly Lys Lys Asp Ala Met Trp Ile Gly Phe Leu Thr Arg 100 105

Thr Val Leu Glu Asn Ser Thr Ser Tyr Glu Glu Ala Lys Asn Leu Leu

Thr Lys Thr Lys Ile Leu Ala Pro Ala Tyr Phe Ile Leu Gly Gly Asn

Gln Ser Gly Glu Gly Cys Val Ile Thr Arg Asp Arg Lys Glu Ser Leu

Asp Val Tyr Glu Leu Asp Ala Lys Gln Gly Arg Trp Tyr Val Val Gln

Thr Asn Tyr Asp Arg Trp Lys His Pro Phe Phe Leu Asp Asp Arg Arg 180 185

Thr Pro Ala Lys Met Cys Leu Asn Arg Thr Ser Gln Glu Asn Ile Ser 195

Phe Glu Thr Met Tyr Asp Val Leu Ser Thr Lys Pro Val Leu Asn Lys 210 215

Leu Thr Val Tyr Thr Thr Leu Ile Asp Val Thr Lys Gly Gln Phe Glu 235 225 230

Thr Tyr Leu Arg Asp Cys Pro Asp Pro Cys Ile Gly Trp 245

<210> 131 <211> 255 <212> PRT

<213> Homo sapien

<400> 131

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Ala Ala Val 1 5 10 15

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg 20 25 30

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro 35 40 45

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu
50 55 60

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu 65 70 75 80

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln Val 85 90 95

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe 100 105 110

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly
115 120 125

Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr 130 135 140

Ser Ile Val Ala Glu Asp Lys Gly His Leu Ile His Gly Arg Asn 145 150 155 160

Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr Trp 165 170 175

Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe Gln 180 185 190

Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly Tyr Val 195 200 205

Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr Leu Asn 210 215 220

Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Glu Ile Leu Gln Asn Pro 225 230 235 240

Cys Phe Ser His Val Leu Asp Val Leu Phe Cys Leu Leu Leu

<210> 132

<211> 256

<212> PRT

<213> Homo sapien

<400> 132

Ser Asp Ala Gly Pro Glu Leu Arg Arg Leu Ser Pro Pro Gly Cys Arg

Arg Gln Leu Cys Arg Arg Ala His Ala Pro Pro Trp Thr Glu Asp Cys

Arg Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val

Pro Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His

Glu Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser 70

Leu Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln 90

Val Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro 100 105

Phe Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu 115 120

Gly Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys 130 135

Thr Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg

Asn Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr 165 170

Trp Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe 185 180

Gln Arg Asn Asn Lys Thr Val Phe Lys Ala Ser Ser Phe Ala Gly Tyr

145

205 200 195

Val Gly Met Leu Thr Gly Phe Lys Pro Gly Leu Phe Ser Leu Thr Leu 215 220

Asn Glu Arg Phe Ser Ile Asn Gly Gly Tyr Leu Glu Ile Leu Gln Asn 230

Pro Cys Phe Ser His Val Leu Asp Val Leu Phe Cys Leu Leu Leu Leu

<210> 133

<211> 245 <212> PRT <213> Homo sapien

<400> 133

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Val

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg 25

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro 40

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu 55 60

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu 70

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln Val 85

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe 100 105

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly 115

Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr 140 130

Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg Asn 150 155 145

Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr Trp

Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe Gln 185

Arg Asn Asn Lys Thr Gly Leu Phe Ser Leu Thr Leu Asn Glu Arg Phe

Ser Ile Asn Gly Gly Tyr Leu Gly Ile Leu Glu Trp Ile Leu Gly Lys

Lys Glu Gly Arg Gly Leu Ala Gly Glu His Gly Pro His Val Ile Asn 230 235 225

Pro Pro Val Arg Thr

<210> 134 <211> 246 <212> PRT <213> Homo sapien

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Ser Asp Ala Gly Pro Glu Leu Arg Arg Leu Ser Pro Pro Gly Cys Arg

Arg Gln Leu Cys Arg Arg Ala His Ala Pro Pro Trp Thr Glu Asp Cys 20 25

Arg Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val

Pro Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His 50

Glu Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser 70

Leu Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln

Val Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro 105 100 110

Phe Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu

147 115 120 125 Gly Glu Ile Ile Ser Phe Asn Ile Phe Tyr Glu Leu Phe Thr Ile Cys Thr Ser Ile Val Ala Glu Asp Lys Lys Gly His Leu Ile His Gly Arg 155 150 Asn Met Asp Phe Gly Val Phe Leu Gly Trp Asn Ile Asn Asn Asp Thr 170 Trp Val Ile Thr Glu Gln Leu Lys Pro Leu Thr Val Asn Leu Asp Phe 185 Gln Arg Asn Asn Lys Thr Gly Leu Phe Ser Leu Thr Leu Asn Glu Arg 195 200

Phe Ser Ile Asn Gly Gly Tyr Leu Gly Ile Leu Glu Trp Ile Leu Gly 210 215

Lys Lys Glu Gly Arg Gly Leu Ala Gly Glu His Gly Pro His Val Ile 225 230 235

Asn Pro Pro Val Arg Thr

<210> 135 <211> 170 <212> PRT <213> Homo sapien

<400> 135

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Val 5

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu 75 65 70

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln Val

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe 105

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly 120

Lys Val His Leu Glu Ala Leu Lys Lys Lys Val Ile Lys Phe Phe Tyr

Lys Phe Pro Leu Arg Cys Asp Ile His Thr Ala Lys Val Leu Tyr Val 150 155 145

Leu Arg Tyr Thr Ala Gln Val His Arg Ser

<210> 136 <211> 171 <212> PRT <213> Homo sapien

<400> 136

Ser Asp Ala Gly Pro Glu Leu Arg Arg Leu Ser Pro Pro Gly Cys Arg

Arg Gln Leu Cys Arg Arg Ala His Ala Pro Pro Trp Thr Glu Asp Cys 20 25

Arg Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val

Pro Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His 50

Glu Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser 70 65

Leu Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Val Met Gln 85

Val Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro 105 100 110

Phe Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu

149

125 115 120

Gly Lys Val His Leu Glu Ala Leu Lys Lys Lys Val Ile Lys Phe Phe

Tyr Lys Phe Pro Leu Arg Cys Asp Ile His Thr Ala Lys Val Leu Tyr 150 155

Val Leu Arg Tyr Thr Ala Gln Val His Arg Ser 165

<210> 137 <211> 162 <212> PRT <213> Homo sapien

<400> 137

Met Glu Thr Asp Lys Gln Glu Lys Lys Glu Val Pro Lys Cys Gly Phe

Leu Pro Gly Asn Glu Lys Val Leu Ser Leu Leu Ala Leu Val Lys Pro 25

Glu Val Trp Thr Leu Lys Glu Lys Cys Ile Leu Val Ile Thr Trp Ile

Gln His Leu Ile Pro Lys Ile Glu Asp Gly Asn Asp Phe Gly Val Ala 55

Ile Gln Glu Lys Val Leu Glu Arg Val Asn Ala Val Lys Thr Lys Val 70 65

Glu Ala Phe Gln Thr Thr Ile Ser Lys Tyr Phe Ser Glu Arg Gly Asp 90

Ala Val Ala Lys Ala Ser Lys Glu Thr His Val Met Asp Tyr Arg Ala 100 105 110

Leu Val His Glu Arg Asp Glu Ala Ala Tyr Gly Glu Leu Arg Ala Met 115

Val Leu Asp Leu Arg Ala Phe Tyr Ala Glu Leu Tyr His Ile Ile Ser 130

Ser Asn Leu Glu Lys Ile Val Asn Pro Lys Gly Glu Glu Lys Pro Ser 150 155 145

150

Met Tyr

<210> 138 <211> 163 <212> PRT

<213> Homo sapien

<400> 138

Met Arg Lys Gly Leu Asn Pro Leu Phe Leu Thr Val Pro Lys Cys Gly

Phe Leu Pro Gly Asn Glu Lys Val Leu Ser Leu Leu Ala Leu Val Lys 25 20

Pro Glu Val Trp Thr Leu Lys Glu Lys Cys Ile Leu Val Ile Thr Trp

Ile Gln His Leu Ile Pro Lys Ile Glu Asp Gly Asn Asp Phe Gly Val

Ala Ile Gln Glu Lys Val Leu Glu Arg Val Asn Ala Val Lys Thr Lys

Val Glu Ala Phe Gln Thr Thr Ile Ser Lys Tyr Phe Ser Glu Arg Gly 85 90 95

Asp Ala Val Ala Lys Ala Ser Lys Glu Thr His Val Met Asp Tyr Arg 100 105

Ala Leu Val His Glu Arg Asp Glu Ala Ala Tyr Gly Glu Leu Arg Ala 115

Met Val Leu Asp Leu Arg Ala Phe Tyr Ala Glu Leu Tyr His Ile Ile 130

Ser Ser Asn Leu Glu Lys Ile Val Asn Pro Lys Gly Glu Glu Lys Pro 150 155

Ser Met Tyr

<210> 139

<211> 269

<212> PRT

<213> Homo sapien

<400> 139

Gly Tyr Tyr Lys Val Leu Gly Lys Gly Lys Leu Pro Lys Gln Pro Val 1 5 10 15

Ile Val Lys Gly Gln Phe Phe Lys Pro Lys Lys Pro Glu Glu Lys Ile 20 25 30

Lys Ser Val Gly Val Arg Leu Ser Gly Glu Ala Arg Lys Gln Val Glu 35 40 45

Val Phe Arg Gln Asn Leu Phe Gln Gly Ala Glu Glu Phe Leu Tyr Arg 50 55 60

Phe Leu Pro Gln Lys Ile Ile Tyr Leu Asn Gln Leu Leu Gln Glu Asp 65 70 75 80

Ser Leu Asn Val Ala Asp Leu Thr Ser Leu Arg Ala Pro Leu Asp Ile 85 90 95

Pro Ile Pro Asp Pro Pro Pro Lys Asp Asp Glu Met Glu Thr Asp Lys

Gln Glu Lys Lys Glu Val Pro Lys Cys Gly Phe Leu Pro Gly Asn Glu 115 120 125

Lys Val Leu Ser Leu Leu Ala Leu Val Lys Pro Glu Val Trp Thr Leu 130 135 140

Lys Glu Lys Cys Ile Leu Val Ile Thr Trp Ile Gln His Leu Ile Pro 145 150 155 160

Lys Ile Glu Asp Gly Asn Asp Phe Gly Val Ala Ile Gln Glu Lys Val 165 170 175

Leu Glu Arg Val Asn Ala Val Lys Thr Lys Val Glu Ala Phe Gln Thr 180 185 190

Thr Ile Ser Lys Tyr Phe Ser Glu Arg Gly Asp Ala Val Ala Lys Ala 195 200 205

Ser Lys Glu Thr His Val Met Asp Tyr Arg Ala Leu Val His Glu Arg 210 215 220

Asp Glu Ala Ala Tyr Gly Glu Leu Arg Ala Met Val Leu Asp Leu Arg 225 230 235 240

Ala Phe Tyr Ala Glu Leu Tyr His Ile Ile Ser Ser Asn Leu Glu Lys 245 250 255

Ile Val Asn Pro Lys Gly Glu Glu Lys Pro Ser Met Tyr 260 265

<210> 140

<211> 229

<212> PRT

<213> Homo sapien

<400> 140

Ala Gly Lys Pro Ala Asn Arg Trp Arg Ser Ser Gly Arg Ile Phe Ser 1 5 10 15

Arg Ala Glu Glu Phe Leu Tyr Arg Phe Leu Pro Gln Lys Ile Ile Tyr 20 25 30

Leu Asn Gln Leu Leu Gln Glu Asp Ser Leu Asn Val Ala Asp Leu Thr 35 40 45

Ser Leu Arg Ala Pro Leu Asp Ile Pro Ile Pro Asp Pro Pro Pro Lys 50 55 60

Asp Asp Glu Met Glu Thr Asp Lys Gln Glu Lys Lys Glu Val Pro Lys 65 70 75 80

Cys Gly Phe Leu Pro Gly Asn Glu Lys Val Leu Ser Leu Leu Ala Leu 85 90 95

Val Lys Pro Glu Val Trp Thr Leu Lys Glu Lys Cys Ile Leu Val Ile 100 105 110

Thr Trp Ile Gln His Leu Ile Pro Lys Ile Glu Asp Gly Asn Asp Phe 115 120 125

Gly Val Ala Ile Gln Glu Lys Val Leu Glu Arg Val Asn Ala Val Lys 130 135 140

Thr Lys Val Glu Ala Phe Gln Thr Thr Ile Ser Lys Tyr Phe Ser Glu 145 150 155 160

Arg Gly Asp Ala Val Ala Lys Ala Ser Lys Glu Thr His Val Met Asp
165 170 175

Tyr Arg Ala Leu Val His Glu Arg Asp Glu Ala Ala Tyr Gly Glu Leu

190 185 180

Arg Ala Met Val Leu Asp Leu Arg Ala Phe Tyr Ala Glu Leu Tyr His 195 200

Ile Ile Ser Ser Asn Leu Glu Lys Ile Val Asn Pro Lys Gly Glu Glu

Lys Pro Ser Met Tyr 225

<210> 141

<211> 253 <212> PRT

<213> Homo sapien

<400> 141

Gly Tyr Tyr Lys Val Leu Gly Lys Gly Lys Leu Pro Lys Gln Pro Val

Ile Val Lys Gly Gln Phe Phe Lys Pro Lys Lys Pro Glu Glu Lys Ile

Lys Ser Val Gly Val Arg Leu Ser Gly Glu Ala Arg Lys Gln Val Glu

Val Phe Arg Gln Asn Leu Phe Gln Gly Ala Glu Glu Phe Leu Tyr Arg 50 55

Phe Leu Pro Gln Lys Ile Ile Tyr Leu Asn Gln Leu Leu Gln Glu Asp 70

Ser Leu Asn Val Ala Asp Leu Thr Ser Leu Arg Ala Pro Leu Asp Ile 85

Pro Ile Pro Asp Pro Pro Pro Lys Asp Asp Glu Met Glu Thr Asp Lys 100 105

Gln Glu Lys Lys Glu Val Pro Lys Cys Gly Phe Leu Pro Gly Asn Glu 115

Lys Val Leu Ser Leu Leu Ala Leu Val Lys Pro Glu Val Trp Thr Leu 140 130 135

Lys Glu Lys Cys Ile Leu Val Ile Thr Trp Ile Gln His Leu Ile Pro 150 155

Lys Ile Glu Asp Gly Asn Asp Phe Gly Val Ala Ile Gln Glu Lys Val

Leu Glu Arg Val Asn Ala Val Lys Thr Lys Val Glu Ala Phe Gln Thr 185

Thr Ile Ser Lys Tyr Phe Ser Glu Arg Gly Asp Ala Val Ala Lys Ala 200

Ser Lys Glu Thr His Val Met Asp Tyr Arg Ala Leu Val His Glu Arg

Asp Glu Ala Ala Tyr Gly Glu Leu Arg Ala Met Val Leu Asp Leu Arg 225 230

Ala Phe Tyr Gln Pro Gly Glu Asn Cys Gln Pro Lys Gly

<210> 142 <211> 213

<212> PRT

<213> Homo sapien

<400> 142

Ala Gly Lys Pro Ala Asn Arg Trp Arg Ser Ser Gly Arg Ile Phe Ser

Arg Ala Glu Glu Phe Leu Tyr Arg Phe Leu Pro Gln Lys Ile Ile Tyr 25 20

Leu Asn Gln Leu Leu Gln Glu Asp Ser Leu Asn Val Ala Asp Leu Thr 35 40

Ser Leu Arg Ala Pro Leu Asp Ile Pro Ile Pro Asp Pro Pro Pro Lys

Asp Asp Glu Met Glu Thr Asp Lys Gln Glu Lys Lys Glu Val Pro Lys

Cys Gly Phe Leu Pro Gly Asn Glu Lys Val Leu Ser Leu Leu Ala Leu

Val Lys Pro Glu Val Trp Thr Leu Lys Glu Lys Cys Ile Leu Val Ile 100 105

Thr Trp Ile Gln His Leu Ile Pro Lys Ile Glu Asp Gly Asn Asp Phe

120 125 115

Gly Val Ala Ile Gln Glu Lys Val Leu Glu Arg Val Asn Ala Val Lys 135

Thr Lys Val Glu Ala Phe Gln Thr Thr Ile Ser Lys Tyr Phe Ser Glu

Arg Gly Asp Ala Val Ala Lys Ala Ser Lys Glu Thr His Val Met Asp 165 170

Tyr Arg Ala Leu Val His Glu Arg Asp Glu Ala Ala Tyr Gly Glu Leu 185 180

Arg Ala Met Val Leu Asp Leu Arg Ala Phe Tyr Gln Pro Gly Glu Asn 200

Cys Gln Pro Lys Gly 210

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Met Gly Gly Asn His Phe Ile Leu Lys Lys Asn Phe Phe Leu Phe 5

Xaa Leu Phe Ile Ser Ser Ser Glu Cys Ser Asp Ile Phe Ser Met Gly 25

Ser Lys Val Pro Lys Tyr Met Ile Ala Ser Gly Asn Ile Gly Asp Arg

Ile Arg Tyr Trp Arg Phe Ser Thr Phe Ile Cys Val 50

<210> 144

<211> 58

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<400> 144

Ser His Ala Gln Asn Val Val Thr Lys Phe Cys Pro Lys Lys Ile Xaa

Pro Gly Leu Ala Thr Ala Ile Arg Arg Thr Val Leu Lys Arg Pro 25

Thr Met Gly Gly Asn His Phe Ile Leu Lys Lys Asn Phe Phe Phe Leu 40

Phe Xaa Leu Phe Ile Ser Ser Ser Glu Cys

<210> 145 <211> 429 <212> PRT <213> Homo sapien

<400> 145

Met Asn Ser Cys Asp Ser Ala Glu Ala Val Leu Ser Ser Glu Thr Arg

Val Ala Pro Ser Val Leu Arg Leu Ala Met Thr Ser Tyr Ser Tyr Arg

Gln Ser Ser Ala Thr Ser Ser Phe Gly Gly Leu Gly Gly Gly Ser Val 40

Arg Phe Gly Pro Gly Val Ala Phe Arg Ala Pro Ser Ile His Gly Val

Leu Arg Leu Ala Ala Ala Val Ser Arg Val Leu Arg Pro Ala Leu Cys 70 75

Pro Arg Pro Pro Arg Gly Gly Tyr Gly Gly Ala Gly Tyr Gly Trp Arg 85 90

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Pro Asp Arg Val Arg Arg Ala Ala Gly Gly Gln Arg Glu Ala Asn His

Ala Glu Pro Gln Arg Pro Pro Gly Leu Leu Pro Gly Gln Gly Ala Arg 115 120 125

Pro Gly Gly Gln Arg Arg Ala Arg Gly Glu Asp Pro Arg Leu Val 130 135 140

Pro Glu Ser Arg Gly Pro Gly Pro Ser Arg Asp Tyr Ser His Tyr Tyr 145 150 155 160

Thr Thr Ile Gln Asp Leu Arg Asp Lys Ile Leu Gly Ala Thr Ile Glu 165 170 175

Asn Ser Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu Ala Ala Asp 180 185 190

Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg Met Ser Val 195 200 205

Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu Leu Thr Leu 210 220

Ala Arg Thr Asp Leu Glu Met Gln Ile Glu Gly Leu Lys Glu Glu Leu 225 230 235 240

Ala Tyr Leu Lys Lys Asn His Glu Glu Glu Ile Ser Thr Leu Arg Gly
245 250 255

Gln Val Gly Gly Gln Val Ser Val Glu Val Asp Ser Ala Pro Gly Thr 260 265 270

Asp Leu Ala Lys Ile Leu Ser Asp Met Arg Ser Asn Met Arg Ser Trp 275 280 285

Pro Ser Arg Thr Arg Lys Asp Ala Glu Ala Trp Phe Thr Ser Arg Thr 290 295 300

Glu Glu Leu Asn Arg Glu Ser Leu Ala His Gly Ala Ala Pro Asp Glu 305 310 315 320

Thr Gly Pro Glu Val Tyr Val Met His Ala Ser Ala Pro Phe Gln Gly 325 330 335

Ser Leu Arg Ile Asp Ala Ala Gly His Arg Gln Ser Asp Glu Gln Leu

350 345 340

Ser Leu Asp Arg Gln His Cys Gly Arg Asn Arg Arg Ala Arg Leu Gly 360 355

Ala Gln Leu Ala Ala Tyr Pro Gly Ala Asp Gln Leu Val Ile Glu Asp

Pro Asp Trp Ala Asp Val Arg Ala Asp Ser Glu Arg Gln Asn Gln Glu 395

Tyr Gln Arg Phe Met Asp Ile Thr Ser Arg Leu Glu Ala Gly Asp Leu 405 410

Pro Thr Tyr Ser Glu Leu Val Glu Gly Arg Glu Asp His 420

<210> 146 <211> 251 <212> PRT

<213> Homo sapien

<400> 146

Leu Pro Thr Ala Ile Ala Ser Arg Arg Pro Arg Pro Ser Glu Ala

Trp Ala Ala Ala Pro Cys Val Leu Gly Arg Gly Ser Leu Phe Ala Arg 25 20

Pro Ala Phe Thr Gly Cys Ser Gly Trp Pro Arg Arg Tyr Pro Val Ser 40 45

Ser Gly Pro Leu Cys Val Leu Val Leu Leu Gly Gly Ala Thr Ala Gly 50

Arg Ala Thr Ala Gly Val Leu Thr Cys Val Arg Arg Ala Ala Gly Gly 70

Gln Arg Glu Ala Asn His Ala Glu Pro Gln Arg Pro Pro Gly Leu Leu

Pro Gly Gln Gly Ala Arg Pro Gly Gly Gln Arg Arg Ala Arg Gly 100

Glu Asp Pro Arg Leu Val Pro Glu Ser Arg Gly Pro Gly Pro Ser Arg 125 120

Asp Tyr Ser His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg Asp Lys Ile 135 130

Leu Gly Ala Thr Ile Glu Asn Ser Arg Ile Val Leu Gln Ile Asp Asn 155 150

Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln 170

Ala Leu Arg Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val 185 190

Leu Asp Glu Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln Ile Glu 195 200

Gly Leu Lys Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Glu 215 210

Ile Ser Thr Leu Arg Gly Gln Val Gly Gln Val Ser Val Glu Val 235 225 230

Asp Ser Ala Pro Gly Thr Asp Leu Ala Lys Ile

<210> 147

<211> 175 <212> PRT <213> Homo sapien

<400> 147

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Ala Val 5

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg 20

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro 35

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu 50

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu 70 75 65

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Ile Met Gln Val

95 85 90

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe 105 100

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly

Lys Val His Leu Glu Ala Leu Lys Lys Lys Val Ile Lys Phe Phe Tyr

Lys Phe Pro Leu Arg Cys Asp Ile His Thr Ala Gln Val Leu Tyr Val 145 150

Leu Asp Ile Gln His Arg Cys Thr Gly Leu Arg Tyr Thr Ala Gln 170

<210> 148 <211> 171 <212> PRT <213> Homo sapien

<400> 148

Met Pro Gly Arg Ser Cys Val Ala Leu Val Leu Leu Ala Ala Val

Ser Cys Ala Val Ala Gln His Ala Pro Pro Trp Thr Glu Asp Cys Arg 20 25

Lys Ser Thr Tyr Pro Pro Ser Gly Pro Thr Tyr Arg Gly Ala Val Pro 40

Trp Tyr Thr Ile Asn Leu Asp Leu Pro Pro Tyr Lys Arg Trp His Glu 50

Leu Met Leu Asp Lys Ala Pro Val Leu Lys Val Ile Val Asn Ser Leu 70

Lys Asn Met Ile Asn Thr Phe Val Pro Ser Gly Lys Ile Met Gln Val

Val Asp Glu Lys Leu Pro Gly Leu Leu Gly Asn Phe Pro Gly Pro Phe 100 105

Glu Glu Glu Met Lys Gly Ile Ala Ala Val Thr Asp Ile Pro Leu Gly 120

161 Lys Val His Leu Glu Ala Leu Lys Lys Lys Val Ile Lys Phe Phe Tyr 130 135 Lys Phe Pro Leu Arg Cys Asp Ile Arg Ala Gln Val Leu Asp Ile Gln 155 Leu Ser Glu Ala Ser Glu Met His Ala Cys Met 165 <210> 149 <211> 115 <212> PRT <213> Homo sapien <220> <221> MISC FEATURE <222> (3)..(4) <223> X=any amino acid <220> <221> MISC\_FEATURE <222> (7)..(8) <223> X=any amino acid <220> <221> MISC\_FEATURE
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Xaa Xaa His Arg Xaa Pro Xaa Ala Val Ala Xaa Gly Asp Ile Gly Arg
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              20
Xaa Trp Pro Gly Thr Lys Met Xaa Xaa Lys Met Gly Xaa Ile Tyr Arg
Thr Glu Tyr Gly Leu Lys Val Trp Arg Ile Asn Xaa Lys His Asn Ile
Ile Tyr Val Asn Gly Phe Val Pro Xaa Xaa Xaa Cys Leu Val Xaa
                       70
                                   75
 Ile Lys Asp Ser Lys Leu Pro Ala Tyr Lys Asp Leu Gly Lys Asn Leu
                  85
                                       90
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163

Pro Phe Pro Thr Tyr Phe Pro Asp Gly Asp Glu Glu Gly Thr Ala Arg

Arg Phe Val 115

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<211> 392

<212> PRT <213> Homo sapien

<400> 150

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Tyr Asp Arg Ala Ile Thr Val Phe Ser Pro Asp Gly His Leu Phe Gln 25

Val Glu Tyr Ala Gln Glu Ala Val Lys Lys Gly Ser Thr Ala Val Gly

Val Arg Gly Arg Asp Ile Val Val Leu Gly Val Glu Lys Lys Ser Val

Ala Lys Leu Gln Asp Glu Arg Thr Val Arg Lys Ile Cys Ala Leu Asp 70

Asp Asn Val Cys Met Ala Phe Ala Gly Leu Thr Ala Asp Ala Arg Ile 90 85

Val Ile Asn Arg Ala Arg Val Glu Cys Gln Ser His Arg Leu Thr Cys

Gly Gly Pro Gly His Cys Gly Val His Gln Pro Cys Tyr Ile Ala Ser

Leu Lys Gln Arg Tyr Thr Gln Ser Asn Gly Arg Arg Pro Phe Gly Ile 135

Ser Ala Leu Ile Val Gly Phe Asp Phe Asp Gly Thr Pro Arg Leu Tyr 150

Gln Thr Asp Pro Ser Gly Thr Tyr His Ala Trp Lys Ala Asn Ala Ile 165 170

Gly Arg Gly Ala Lys Ser Val Arg Glu Phe Leu Glu Lys Asn Tyr Thr 185 180

Asp Glu Ala Ile Glu Thr Asp Asp Leu Thr Ile Lys Leu Val Ile Lys 195 200 205

Ala Leu Leu Glu Val Val Gln Ser Gly Gly Lys Asn Ile Glu Leu Ala 210 215 220

Val Met Arg Arg Asp Gln Ser Leu Lys Ile Leu Asn Pro Glu Glu Ile 225 230 235 240

Glu Lys Tyr Val Ala Glu Ile Asp Thr Glu Asn Lys Lys Asp Thr Glu 245 250 255

Lys Lys Glu Tyr Lys Lys Ala Ser Trp Met Asn Lys Met Ser Leu 260 265 . 270

Leu Cys Asn Phe Ile His Asn Phe Ser Ile Gln Leu Met Asp Glu Ser 275 280 285

Arg Cys Val Gly Leu Ser Ile Pro Phe Ile His Thr Glu Cys Pro Thr 290 295 300

Ile Asn Phe Arg Ile Phe Arg Leu Leu Gln Arg Pro Ser Phe Pro Trp 305 310 315 320

Gly Ala Gly Gly Pro Arg Asn Pro Pro Gly Gly Pro Tyr Leu Ala Gly
325 330 335

Cys Pro Gly Leu Arg Leu Pro Arg Arg Ala Pro Tyr Gly Ser Ala His 340 345 350

Leu Ile Pro His Gly Tyr Gly Asp Arg Ala Phe Thr Arg Ser Gly Asp 355 360 365

Gly Val Thr Ser Leu Ala Arg Asp Leu Cys Glu Gly Pro Leu Ile Arg 370 375 380

Ala Cys Thr Cys Trp His Met Pro 385 390

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120

115

166

Ile Ser Ala Leu Ile Val Gly Phe Asp Phe Asp Gly Thr Pro Arg Leu

Tyr Gln Thr Asp Pro Ser Gly Thr Tyr His Ala Trp Lys Ala Asn Ala

Ile Gly Arg Gly Ala Lys Ser Val Arg Glu Phe Leu Glu Lys Asn Tyr

Thr Asp Glu Ala Ile Glu Thr Asp Asp Leu Thr Ile Lys Leu Val Ile 180 185

Lys Ala Leu Leu Glu Val Val Gln Ser Gly Gly Lys Asn Ile Glu Leu

Ala Val Met Arg Arg Asp Gln Ser Leu Lys Ile Leu Asn Pro Glu Glu 210

Ile Glu Lys Tyr Val Ala Glu Ile Asp Thr Glu Asn Lys Xaa Xaa Xaa 235 230 225

Leu Lys Arg Xaa Asn Thr Xaa Arg Lys His His Xaa 245

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Met Gln Ile Met Tyr Gly Ile Ser Ser Ser Cys Ile Leu Leu Tyr Ile

Asp Ala Gln Gly His Gln Arg Leu Tyr Asn Cys Thr Leu Ala Thr Asn 20

Leu Gln Cys Leu Tyr Arg Val Ser Gly Lys Ile Ser Gly Arg Ser Ser

Asp Arg Tyr Thr Arg Tyr Glu Glu Phe Gln Gln Leu Ser Ala Gly Ile 55 60

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Cys Ile Leu Leu Tyr Ile Asp Ala Gln Gly His Gln Arg Leu Tyr Asn
Cys Thr Leu Ala Thr Asn Leu Gln Cys Leu Tyr Arg Val Ser Gly Lys
Ile Ser Gly Arg Ser Ser Glu Asp Thr Arg Ala Met Lys Ser Ser Ser
Ser Leu Ala Gln Ala Ser Arg Glu Asp His Cys Glu Pro His Glu Val
Pro Asp Gln Ala Leu Gly Asn Val Val Thr Pro His Phe Tyr Leu Phe
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WO 2004/052290 168 <222> (39)..(40) <223> X=any amino acid <220> <221> MISC\_FEATURE <222> (42)..(42) <223> X=any amino acid <220> <221> MISC\_FEATURE
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Asn Val Ser Leu Lys Arg Xaa Ala Ser Thr Gly Val Xaa Leu Asn Gly 20

Xaa Arg Glu Ser Ser Phe Xaa Xaa Pro Xaa Thr Ser Lys Gly Val Ala 35 40

Pro Glu Gly Cys His Gly Gly Ala Ala Gly Pro Lys Leu Gly Xaa

Thr Ser Pro Ala Ser Ala Arg Ser Arg Cys Ser Ala Ala Ala Ser Ala 65 70

Lys Gly Ser Gln Phe Cys Thr Thr Xaa His Gly Trp Arg His Glu Phe

Leu Gly Met Ser Lys Gly Leu Glu Ser Ala Leu Lys Asp Xaa Lys Ile

169

110 100 105

Xaa

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Asp Xaa Met Thr Cys Xaa Glu Phe Val Ala Phe Ile Leu Ala Ala Gly

Glu Ala Gly Arg Gly Val Arg Glu Xaa Asn Gly Cys Phe Ala Glu Cys 35

Phe Trp Gly Thr Asn Xaa Xaa Ser His Arg Gly Phe Xaa Leu Lys Lys

Gly Gly Tyr Arg Trp Gly Ala Phe Leu Thr Tyr Ser Arg Asn Thr Cys

75 70 80 65

Leu Phe Leu Glu Cys Phe His Leu Leu 85

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Thr Ser Thr Arg Xaa Leu Arg Glu His Gln Lys Gly Arg Pro Thr Ser 20 25 30

Thr Asn Pro Xaa Ala Gln Gln Ser Gln Asp Thr Gly Leu Glu His

Arg Gly Lys Leu Asp Gly Asn Gln Asp Pro Asn Arg Phe Ala Gln Lys

Arg Glu Lys Gly Val Arg Gly Asp Val Cys Val Glu Trp Glu Pro Leu 65

Thr Lys Asp Leu Ala Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu 90 85

Asn Glu His Phe Leu Asn Thr Thr Asp Phe Pro Xaa His Pro Leu Lys 100 105

Glu Gln Pro Trp Thr Glu Pro Trp Ala Gly Ser Arg Gly Arg Arg His 120

Pro Trp Leu Gln Trp Arg Gly Gln Gly

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Lys Gly Arg Pro Thr Ser Thr Asn Pro Xaa Ala Gln His Xaa Ala Xaa
His Trp Leu Glu His Arg Gly Lys Leu Xaa Gly Pro Thr Xaa Xaa Val
Xaa Pro Xaa Xaa Arg Arg Trp Arg Gly Asp Gly Glu Trp Ser His
Asp Gln Gly Pro Gly Gly Xaa Xaa Ser Arg Pro Gln Gln Cys Glu Ala
                      70
Glu Arg Ala Leu Pro Glu His His Gly Leu Pro Xaa His His Gln Xaa
                 85
                                       90
Gln Pro Gly Gln Ser Pro Gly Gln Ala Val Gly Gly Gly Ala Thr His
             100
Gly Cys Ser Gly Gly Ala Arg Ala Glu Pro Ala Gly Pro Pro Glu Arg
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120

115

Gly Arg Gly 130

<210> 158

<211> 71

<212> PRT

<213> Homo sapien

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Met Arg Ser Gln Tyr Glu Val Met Ala Glu Gln Asn Arg Lys Asp Ala 5

Lys Pro Gly Ser Pro Ala Gly Leu Lys Asn Leu Thr Gly Arg Ser Leu 25

Ala Pro Arg Ser Ser Ser Lys Leu Ala Gly Pro Arg Phe Phe Thr Phe

Gly Ala Pro Phe Arg Val Phe Arg Phe Ser Cys Ser Pro Tyr Asn Asn 50

Leu Phe Ala Ser Lys Val Leu

<210> 159

<211> 104 <212> PRT <213> Homo sapien

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Thr Cys Glu Ala Asn Ile Arg Ser Trp Pro Ser Arg Thr Gly Arg Met

Leu Lys Pro Gly Ser Pro Ala Gly Leu Lys Asn Leu Thr Gly Arg Ser 20

Leu Ala Pro Arg Ser Ser Ser Lys Leu Ala Gly Pro Arg Phe Phe Thr

Phe Gly Ala Pro Phe Arg Val Phe Arg Phe Ser Cys Ser Pro Tyr Asn 55

Asn Leu Phe Ala Ser Lys Val Leu Leu Gly Ser Arg Leu Trp Gly Phe 65

Cys Cys Pro Leu Glu Gly Val Phe Trp Val Lys Gly Trp Glu Gly Arg

174

95 85 90

Asp Pro Tyr Pro Arg Leu Phe Ser 100

<210> 160

<211> 136

<212> PRT

<213> Homo sapien

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Met Arg Leu Cys Lys Val Phe Ala Gly Gly Phe Gly Pro Ala Pro Pro

Gly His Gln Glu Ser Thr Val Ala Thr Ser Thr Pro Ser Thr Asn Leu 25

Lys Phe Ala Arg His Cys Gly Ala Arg Gln Cys Ser Pro Ser Trp Glu

Lys Leu Ala Trp Ala Lys Glu Lys Tyr Ser Tyr Trp Gly Ala His Ser

Ala Ile His Leu Gly Arg Gly Val Tyr Leu Gln Pro Leu His Glu Ser 70

Glu Trp Pro Trp Phe Leu Arg Trp Gly Trp Leu Gly Thr Ser Leu Leu 90 95 85

Ala Arg Cys Leu Ala Ser Arg Arg Glu Lys Thr Val Gln Gln His Ala 100 105

Gly Glu Thr Asp Pro Val Thr Thr Met Arg Ala Val Arg Arg Glu Lys 125 120

Asp Gln Phe Lys Met Pro Arg Asp 135 130

<210> 161

<211> 108

<212> PRT <213> Homo sapien

<400> 161

Ser Leu Cys Trp Arg Ser Trp Ala Gly Ser Pro Arg Thr Ser Arg Val 5 10

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175

Tyr Cys Gly His Glu Tyr Thr Ile Tyr Asn Leu Lys Phe Ala Arg His 20 25 30

Cys Gly Ala Arg Gln Cys Ser Pro Ser Trp Glu Lys Leu Ala Trp Ala 35 40 45

Lys Glu Lys Tyr Ser Tyr Trp Gly Ala His Ser Ala Ile His Leu Gly 50 55 60

Arg Gly Val Tyr Leu Gln Pro Leu His Glu Ser Glu Trp Pro Trp Leu 65 70 75 80

Leu Arg Trp Ala Trp Leu Gly Thr Ser Leu Leu Ala Arg Cys Leu Ala 85 90 95

Ser Arg Gln Gly Glu Asp Gly Ala Ala Arg Arg 100 105

<210> 162

<211> 164

<212> PRT

<213> Homo sapien

<400> 162

Met Leu Ala Gly Arg Leu Cys Ala Val Arg Leu Ala Val Ser Arg Leu 1 5 10 15

Ser Gly Thr Gly Val Val Gly Ala Glu Glu Glu Gln Gln Arg Gly Gly
20 25 30

Gly Ala Cys Val Pro Cys Ala Leu Glu Arg Thr Ala Ala Met Ala Tyr 35 40 45

Ala Tyr Leu Phe Lys Tyr Ile Ile Gly Asp Thr Gly Val Gly Lys 50 55 60

Ser Cys Leu Leu Gln Phe Thr Asp Lys Arg Phe Gln Pro Val His 65 70 75 80

Asp Leu Thr Ile Gly Val Glu Phe Gly Ala Arg Met Ile Thr Ile Asp 85 90 95

Gly Lys Gln Ile Lys Leu Gln Ile Trp Asp Thr Ala Gly Gln Glu Ser

Phe Arg Ser Ile Thr Arg Ser Tyr Tyr Arg Gly Ala Ala Gly Ala Leu 115 120 125

176

Leu Val Tyr Asp Ile Thr Arg Arg Asp Thr Phe Asn His Leu Thr Thr 135 140 130

Trp Leu Glu Asp Ala Arg Gln His Ser Asn Ser Asn Met Val Ile Met 150 155

Leu Ile Gly Lys

<210> 163

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Gly Leu Gly Arg Ala Leu Ser Pro Ser Ala Leu Arg Val Ser Val Arg

Pro Ala Ser Ser Gln Pro Leu Thr Pro Ala Cys Xaa Xaa Asp Ser Ser 35 40 45

Xaa Xaa Ala Gly Xaa Leu Cys Ala Val Arg Leu Xaa Val Ser Arg Leu 50 55

177

Ser Gly Thr Gly Val Val Gly Ala Glu Glu Glu Gln Gln Arg Gly Gly

Gly Ala Cys Val Pro Cys Ala Leu Glu Arg Thr Ala Ala Met Ala Tyr

Ala Tyr Leu Phe Lys Tyr Ile Ile Ile Gly Asp Thr Gly Val Gly Lys

Ser Cys Leu Leu Gln Phe Thr Asp Lys Arg Phe Gln Pro Val His 120

Asp Leu Thr Ile Gly Val Glu Phe Gly Ala Arg Met Ile Thr Ile Asp

Gly Lys Gln Ile Lys Leu Gln Ile Trp Asp Thr Ala Gly Gln Glu Ser

Phe Arg Ser Ile Thr Arg Ser Tyr Tyr Arg Gly Ala Ala Gly Ala Leu 170 165

Leu Val Tyr Asp Ile Thr Arg Arg Asp Thr Phe Asn His Leu Thr Thr 185

Trp Leu Glu Asp Ala Arg Gln His Ser Asn Ser Asn Met Val Ile Met 195 200

Leu Ile Gly Lys 210

<210> 164

<211> 97 <212> PRT <213> Homo sapien

<400> 164

Met Phe Met Ser Asp Leu Ser Thr Arg Gly Val Val Trp Ala Ser Pro

Ile Ile Lys Phe Arg Pro Gly Ser Val Val Gln Leu Thr Leu Ala 25

Phe Arg Glu Gly Thr Ile Asn Val His Asp Val Glu Thr Gln Phe Asn

Gln Tyr Lys Thr Asp Ala Ala Ser Arg Tyr Asn Leu Thr Ile Ser Asp 50 55 60

178

Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln Ser Gly Ala 65

Gly Val Pro Gly Trp Gly Ile Gly Leu Leu Ser Leu Val Ile Ala Gly

Ala

<210> 165 <211> 54 <212> PRT <213> Homo sapien

<400> 165

Arg Arg Arg Ala Gly Gln Gly Leu Ser Gly Gly Ser Leu Ser Ser Leu

Glu Ser Ala Thr Thr Asp Ser Asp Leu Asp Tyr Asp Tyr Leu Gln Asn 25 20

Trp Gly Pro Arg Phe Lys Lys Leu Ala Asp Cys Met Ser Ser Lys Asp 40

Thr Cys Glu Asp Asp Ser

<210> 166

<211> 73 <212> PRT

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<400> 166

Thr Gly Ile Phe Leu Xaa Gln Gly Lys Ala His Leu Lys Gln Ala Lys

Phe Tyr Arg Glu Asp Thr Phe Asn Lys Thr Ala Arg Thr Ser Lys Trp 20

Val Asn Xaa Trp Xaa Asn Thr Leu Xaa Leu Thr Lys Arg Ala Asn Met 40

Xaa Ser Cys Leu Ser Thr Ser Leu Glu Lys Lys Arg Thr Xaa Trp His 55

Thr Lys Tyr Leu Ser Glu Gly Glu Val

<210> 167

<211> 55

<212> PRT <213> Homo sapien

<400> 167

Leu Ser Gly Thr Ala Arg Ile Ser Arg Ser Glu Val Thr Asp Leu Arg

Arg Thr Leu Gln Val Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met

Lys Ala Ala Leu Glu Asp Thr Leu Ala Glu Thr Glu Ala Arg Phe Gly

Ala Gln Leu Ala His Ile Gln 50

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180

<210> 168 <211> 211

<212> PRT

<213> Homo sapien

<400> 168

Met Gly Gln Glu Ser His Ala Ser Arg Ala Ala Ser Ser Pro Ala Ala 1 5 10 15

Arg Ala Pro Glu Thr Ala Glu Pro Val Arg Pro Ala Pro Pro Thr 20 25 30

Pro Asp Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val Gln Lys 35 40 45

Ala Lys Leu Ala Glu Gln Leu Ser Asp Met Met Thr Cys Ser Leu Leu 50 55 60

Lys Ser Val Thr Glu Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn 65 70 75 80

Leu Leu Ser Val Ala Tyr Lys Asn Val Val Gly Ala Arg Arg Ser Ser 85 90 95

Trp Arg Val Val Ser Ser Ile Glu Gln Lys Thr Glu Gly Ala Glu Lys
100 105 110

Lys Gln Gln Met Ala Arg Glu Tyr Arg Glu Lys Ile Glu Thr Glu Leu 115 120 125

Arg Asp Ile Cys Asn Asp Val Leu Ser Leu Leu Glu Lys Phe Leu Ile 130 135 140

Pro Asn Ala Ser Gln Ala Glu Ser Lys Val Phe Tyr Leu Glu Asn Glu 145 150 155 160

Lys Glu Ile Thr Thr Val Thr Trp Leu Arg Leu Pro Leu Val Met Thr 165 170 175

Lys Lys Gly Ile Ser Ile Ser His Lys Lys His Thr Lys Lys Leu Phe 180 185 190

Asp Ile Ser Thr Thr Glu Met Pro Pro Thr His Pro Ile Arg Leu Gly
195 200 205

Leu Ala Leu

181

210

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Arg Arg Ser Met Gly Gln Glu Ser His Ala Ser Arg Ala Ala Xaa Arg

182

95 90 85

Xaa Pro Pro Xaa Xaa Arg Leu Leu Ser Pro Ser Val Arg Arg His His 100 105

Pro Leu Arg Asp Thr Glu His Pro Val Met Asp Lys Asn Glu Leu Val

Gln Lys Ala Lys Leu Ala Glu Gln Leu Ser Asp Met Met Thr Trp Gln

Pro Ala 145

<210> 170

<211> 118 <212> PRT

<213> Homo sapien

<400> 170

Met Pro Asp Gly Gln Phe Arg Asp Ile Ser Leu Ser Asp Tyr Lys Glu

Asn Met Leu Cys Ala Ser Leu Pro Ser Gly Leu Gln Arg Leu Met Cys 20 25

Pro Thr Glu Val Ser Ser Leu Ser Val Asp Arg Ala Glu Glu Phe Lys 40 35

Lys Leu Lys Leu Pro Gly Asp Gly Cys Ser Leu Trp Tyr Phe Val Thr 50 55

Ser Val Tyr Leu Val Met Gly Gln Tyr Gln Pro Asp Glu Asp Asn Gly 65

Gly Leu Gly Pro Met Asn Ile Pro Leu Val Ser Asp Pro Lys Arg Thr 85

Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly Ile Ser Phe 105 100

Arg Gly Leu Phe Tyr His 115

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                                     10
Arg Ala Glu Glu Phe Lys Lys Leu Lys Leu Pro Gly Asp Gly Cys Ser
                       25
Leu Trp Xaa Ser His Phe Cys His Leu Ser Trp Val Asn Thr Pro Xaa
        35
Xaa Thr Xaa Arg Thr Gly Thr His Glu His Pro Leu Val Ser Asp Pro
    50
                          55
Lys Arg Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly
                                          75
65
                     70
Ile Ser Phe Arg Gly Leu Phe Tyr His
                 85
<210> 172
<211> 89
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Arg Ala Glu Glu Phe Lys Lys Leu Lys Leu Pro Gly Asp Gly Cys Ser 25

Leu Trp Xaa Ser His Phe Cys His Leu Ser Trp Val Asn Thr Pro Xaa 40

Xaa Thr Xaa Arg Thr Gly Thr His Glu His Pro Leu Val Ser Asp Pro

Lys Arg Thr Ile Ala Gln Asp Tyr Gly Val Leu Lys Ala Asp Glu Gly

Ile Ser Phe Arg Gly Leu Phe Tyr His 85

<210> 173 <211> 144 <212> PRT

<213> Homo sapien

<400> 173

Ala Gly Arg Leu Ser His Leu Gln Ala Ala Tyr Gly Arg Arg Ala Pro

Ser Val Pro Ser Val Ala Val Trp Pro Glu Trp Val Pro Ser Ser Pro 25

Thr Leu Val Leu Ala Gln Thr Leu Trp Gln Asp Val Trp Gly Leu Thr 40

Gln Gln Glu Arg Val Gln Ala Gly Gln Ala Val His Leu Asp Pro Gln 50 55

Leu Pro Arg Glu His Pro Thr Leu Cys Gly Val Asp Cys Thr Leu Ser 70 75

185

Leu Thr Leu Thr Leu Gln Gly Phe Arg Phe Cys His Arg Lys Arg Pro

Pro Pro Pro Leu Pro Phe Leu Phe Cys Gln Thr Leu Lys Leu Glu Leu 105 100

Leu Asn Leu Ser Trp Gly Asn Leu Gln Asn Trp Gly Pro Lys Phe Gly 120

Val Ser Val Ala Glu Pro Ser Ser Leu Leu Ser Pro Tyr Thr Asp Lys

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Met Asp Arg Pro Gly Arg Tyr Tyr Ser Ala Ser Asn Gly Glu Pro Asp
Glu Asp Ala Tyr Asp Met Arg Lys Ala Leu Ser Arg Asp Thr Glu Lys
Lys Ser Ile Ile Pro
         35
<210> 176
<211> 42
<212> PRT
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Ser Gly Ala Ser Val Met Asp Arg Pro Gly Arg Tyr Tyr Ser Ala Ser
Asn Gly Glu Pro Asp Glu Asp Ala Tyr Asp Met Arg Lys Ala Leu Ser
Arg Ile Leu Arg Arg Asn Pro Ser Tyr His
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Xaa Val Ala Phe Leu Lys Pro Asn Leu Cys Pro Ile Gln Ser Gln Pro
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188

Cys Thr Asn Tyr Pro Lys Asn Ile Gln Leu Ala Arg Arg Ile Thr Trp

Arg Thr Cys Leu Arg Ile His Tyr Asp Gly Lys His Phe Ile Leu Lys 40

Lys Lys Lys Xaa Asn Phe Ser Ser Ser Cys Tyr Trp

<210> 178 <211> 80 <212> PRT <213> Homo sapien

<400> 178

Lys Asn Ala Pro Gly Gly Glu Gln His Gly Val Arg Gly Thr Lys Ile

Pro Arg Ser Gly Ala Ser Arg Gly Thr Asn Ser Glu Asp Ile Ile Lys 25

Lys Arg Gly Phe Lys Glu Arg Ala Val Asp Ile Lys Ile Leu Ala Pro

Arg Arg Gly Gly Met Lys Thr Arg Gln Ala Asp Gly Ala Ser Ile Thr

Arg Gln Asp Thr Arg Thr Arg Arg Gln Gln Arg Gly Ala Ser Val Arg 70 65

<210> 179

<211> 130 <212> PRT

<213> Homo sapien

<400> 179

Asp Gly Ser Ala Ala Arg Gly Arg Trp Leu Ala Ser Ala Ala Arg Gly

Ala Ala Ala Leu Arg Arg Ser Ile Asn Gln Pro Val Ala Phe Val Arg

Arg Ile Pro Trp Thr Ala Ala Ser Ser Gln Leu Lys Glu His Phe Ala 40 35

Gln Phe Gly His Val Arg Arg Cys Ile Leu Pro Phe Asp Lys Glu Thr 55

Gly Phe His Arg Gly Leu Gly Trp Val Gln Tyr Phe Phe Arg Arg Arg

Thr Ser Gly Met His Tyr Asn Arg Lys Asn His Ile Ile Asp Gly Val 90

Lys Val Gln Val His Thr Arg Arg Pro Lys Leu Ser Ala Asn Thr Leu

Met Met Lys Lys Glu Lys Asp Phe Leu Arg Thr Ala Ser Leu Phe Asn 120 125

Lys Gly 130

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Ala Ala Leu Arg Arg Ser Ile Asn Gln Pro Val Ala Phe Val Arg

Arg Ile Pro Trp Thr Ala Ala Ser Ser Gln Leu Lys Glu His Phe Ala

Gln Phe Gly His Val Arg Arg Cys Ile Leu Pro Phe Asp Lys Glu Thr

Gly Phe His Arg Gly Leu Gly Trp Val Gln Xaa Phe Phe Arg Arg Arg

Thr Ser Gly Met His Tyr Asn Arg Lys Asn His Ile Ile Asp Gly Val 95 85 90

Lys Val Gln Val His Thr Arg Arg Pro Lys Leu Ser Ala Asn Thr Leu 100 105

190

Met Met Lys Lys Glu Lys Asp Phe Leu Arg Thr Ala Ser Leu Phe Asn 120

Lys Gly 130

<210> 181 <211> 130 <212> PRT <213> Homo sapien

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<400> 181

Arg Asp Ser Xaa Pro Arg Phe Leu Ala Ser Ile Gly Leu His Val Ser 10

Pro Arg Phe Val Ala Tyr Glu Leu Thr Val Leu Val Phe Leu Thr Leu

Ser Val Gly Gly Asp Glu Val Ser Pro Gly Gly Ala Gly Pro Val Ser

His Ser Ala Glu Glu Gln Pro Val His Gln Val Asp Arg Leu Cys Gly

Ala Cys Pro Gly Gln Arg Val Phe Leu Cys Pro Gly Glu Pro Gly Ala

Lys Ser Gly Arg His Leu Ser Gly Gly Val Pro Pro Tyr Thr Glu Cys

Asp His Ala Gln Pro Leu Ala Arg Pro Gly Ala Val Glu Ser Cys Asn

His Glu Val Cys Ala Gln Thr Gly Glu Thr Val Gln Pro Leu Met Ala

Arg Arg 130

<210> 182 <211> 71

191

<212> PRT <213> Homo sapien

<400> 182

Met Gly Asn Ile Phe Ala Asn Leu Phe Lys Gly Leu Phe Gly Lys Lys

Glu Met Arg Ile Leu Met Val Gly Leu Asp Ala Ala Gly Lys Thr Thr

Ile Leu Tyr Lys Leu Lys Leu Gly Glu Ile Val Thr Thr Ile Pro Thr 35 40

Ile Gly Phe Asn Val Glu Thr Val Glu Tyr Leu Gly Arg Asp His Ala 50

Ile His His Thr Gly Ala Ala

<210> 183

<211> 57

<212> PRT

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Gly Trp Gly Lys Asp Tyr Thr Glu Arg Gln Ala His Val Arg Ala Ile 20

Leu Val Ser Asn Val Pro Cys Pro Gly Leu Met Leu Ala Thr Leu Cys 40

Arg Glu Phe Ser Asn Thr Ala Val Ala 50

<210> 184

<211> 56

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Xaa Gly Pro Xaa Xaa Gln Asn Xaa His Xaa Xaa Pro Ala Arg Xaa Gly

193

15 5 10

Xaa Gly Xaa Xaa Xaa Thr Xaa Arg Gln Ala His Val Arg Ala Ile Leu 25 20

Val Ser Asn Val Pro Cys Pro Gly Leu Met Leu Ala Thr Leu Cys Arg 40

Glu Phe Ser Asn Thr Xaa Val Xaa

<210> 185 <211> 147 <212> PRT

<213> Homo sapien

<400> 185

Met Phe Leu Thr Arg Ser Glu Tyr Asp Gly Gly Val Asn Thr Phe Ser

Pro Glu Gly Arg Leu Phe Gln Val Glu Tyr Ala Ile Glu Ala Ile Lys

Leu Gly Ser Thr Ala Ile Gly Ile Gln Thr Ser Glu Gly Val Cys Leu 40

Ala Val Glu Lys Arg Ile Thr Ser Pro Leu Met Glu Pro Ser Ser Ile 50 55

Glu Lys Ile Val Glu Ile Asp Ala His Ile Gly Cys Ala Met Ser Gly 75

Leu Ile Ala Asp Ala Lys Thr Leu Ile Asp Lys Ala Arg Val Glu Thr 85

Gln Asn His Trp Phe Thr Tyr Asn Glu Thr Met Thr Val Glu Ser Val 105 100

Thr Gln Ala Val Ser Asn Leu Ala Leu Gln Phe Gly Glu Glu Asp Ala 120

Asp Pro Gly Ala Met Ser Arg Pro Phe Gly Val Ala Leu Leu Phe Gly 135 140

Gly Val Asp

194

<210> 186 <211> 118 <212> PRT <213> Homo sapien

<400> 186

Gly Tyr Gln Ala Trp Phe Tyr Ser His Cys Ile Gln Thr Ser Glu Gly

Val Cys Leu Ala Val Glu Lys Arg Ile Thr Ser Pro Leu Met Glu Pro

Ser Ser Ile Glu Lys Ile Val Glu Ile Asp Ala His Ile Gly Cys Ala

Met Ser Gly Leu Ile Ala Asp Ala Lys Thr Leu Ile Asp Lys Ala Arg

Val Glu Thr Gln Asn His Trp Phe Thr Tyr Asn Glu Thr Met Thr Val 70 75

Glu Ser Val Thr Gln Ala Val Ser Asn Leu Ala Leu Gln Phe Gly Glu

Glu Asp Ala Asp Pro Gly Ala Met Ser Arg Pro Phe Gly Val Ala Leu

Leu Phe Gly Gly Val Asp 115

<210> 187

<211> 140 <212> PRT <213> Homo sapien

<400> 187

Met Thr Pro Ser Asp Arg Arg His Ser Tyr Arg Pro Ala Leu Leu Cys

Ala Asp Thr Pro Arg Ile Arg Pro Leu Trp Pro Gly Gly His Ser Phe

Ala Asp Ser Ile Arg Ala Glu Met Ser Arg Ser Val Ala Leu Ala Val 35

Leu Ala Leu Leu Ser Leu Ser Gly Leu Glu Ala Ile Gln Arg Thr Pro 50

195

Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu Asn Gly Lys Ser Asn 70 75 Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu 120 Phe Thr Pro Thr Glu Val Lys Trp Asp Arg Asp Met 135 <210> 188 <211> 140 <212> PRT <213> Homo sapien <220> <221> MISC\_FEATURE <222> (1)..(3) <223> X=any amino acid <220> <221> MISC\_FEATURE
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<223> X=any amino acid <400> 188

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Arg Xaa Tyr Xaa Xaa Ile Arg Pro Leu Trp Pro Gly Gly His Ser Xaa

Ala Asp Ser Ile Arg Ala Glu Met Ser Arg Ser Val Ala Leu Ala Val 40

Leu Ala Leu Leu Ser Leu Ser Gly Leu Glu Ala Ile Gln Arg Thr Pro

Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu Asn Gly Lys Ser Asn 70

Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro Ser Asp Ile Glu Val

Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys Val Glu His Ser Asp

Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu 120

Phe Thr Pro Thr Glu Val Lys Trp Asp Arg Asp Met 135

<210> 189 <211> 84 <212> PRT <213> Homo sapien

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Met Glu Gly Ala Glu Thr Leu Gly Trp Ala Ala Arg Leu Gly Gly Cys

Gly Leu Ser Ala Gln Gly Leu Gly Gln Ser Trp Leu Gln Glu Ala Gly

Thr Pro Val Val Gly Arg Arg Val Leu Gln Arg Leu Thr Gly Ala

Cys Leu Cys Leu Cys Ser Arg Glu Gly Asp Leu Ser Gly Gln Gly Leu 55

Ala Ser Ala Leu Pro Glu Val Arg Glu Met Trp Glu Asp Ala Asp Leu 65

Trp Gly Pro Arg

<210> 190 <211> 160 <212> PRT <213> Homo sapien

<400> 190

Met Val Pro Cys Pro Pro Arg Ser Val Leu Ser Gln Ala Arg Val Leu 5

Pro Glu Gly Gly Gly Pro Asp Asp Leu Ser Trp Ala Leu Gly Gln 20 25

Ile Arg Gly Pro Gln Gly Pro Ser Pro Gly Phe Arg Gly Arg Gly Ala

Arg Gly Gly Val Ser Lys Gly Arg Gly Pro Gly Val Pro Glu Arg Arg 50

Gly Pro Gly Arg Ile His Pro Val Ser Arg Leu Gln Pro Val Pro Pro 70 75

Gln Pro Leu Pro Pro Ala Pro Asp Pro Glu Pro Pro Cys Pro Ser Val 85

Pro Ser Ala Thr Arg Arg Cys Thr Ser Asp Trp His Arg Pro Cys Leu .100 105

Lys Cys Glu Lys Cys Gly Lys Thr Leu Thr Ser Gly Gly His Ala Glu

His Glu Gly Lys Pro Tyr Cys Asn His Pro Cys Tyr Ala Ala Met Phe

Gly Pro Lys Gly Phe Gly Arg Gly Gly Ala Glu Ser His Thr Phe Lys 155 150

<210> 191

<211> 138 <212> PRT <213> Homo sapien

<400> 191

Met Val Pro Cys Pro Pro Arg Ser Val Leu Ser Gln Ala Arg Val Leu

198

Pro Glu Gly Gly Gly Pro Asp Asp Leu Ser Trp Ala Leu Gly Leu

Asp Ser Glu Val Pro Arg Val Gln Val Leu Gly Ser Glu Gly Gly Ala 40

Arg Gly Ala Val Ser Pro Arg Gly Gly Val Pro Gly Ser Leu Lys Gly

Ala Asp Gln Ala Gly Ser Thr Gln Ser Arg Ala Cys Ser Pro Cys Arg

Pro Ser Arg Cys Arg Leu His Arg Thr Arg Ser Arg His Ala Gln Val 85

Ser Gln Val Gln Gln Gly Gly Val Leu Gln His Glu Gly Lys Pro Tyr

Cys Asn His Pro Cys Tyr Ala Ala Met Phe Gly Pro Lys Gly Phe Gly 115 120

Arg Gly Gly Ala Glu Ser His Thr Phe Lys

<210> 192

<211> 120 <212> PRT <213> Homo sapien

<400> 192

Lys Ala Arg Thr Arg Pro Asp Pro Pro Ser Leu Ala Pro Ala Ala Arg 5

Ala Ala Pro Ala Ala Ala Cys Thr Gly Pro Gly Ala Ala Met Pro 25

Lys Cys Pro Lys Cys Asn Lys Glu Val Tyr Phe Ser Thr Lys Ala Asn

Pro Thr Ala Thr Thr Pro Ala Thr Gln Pro Cys Leu Gly Leu Lys Ala

Leu Gly Gly Ala Glu Pro Arg Ala Thr Leu Ser Ser Lys Pro Gly Gly 75 70

Gly Asp Pro Ile Leu Gly Cys Leu Gln Gly His Cys Pro Gly Lys Cys

199

90 95 85

Gln Ala Leu Ser Pro Asp Ala Gln Gly Ser Leu Val Ala Pro Asn Ala 100 105

Leu Ser Lys Pro Glu His Leu Glu 115

<210> 193

<211> 34 <212> PRT <213> Homo sapien

<400> 193

Arg Lys Lys Ser Asn Thr Gln Trp Pro Leu Gly Thr Tyr His Leu Ser

Ala Pro Gly Tyr Asp Arg Ala Arg Pro Gly Arg Cys Gln Arg Arg Gly

Phe Cys

<210> 194

<211> 78 <212> PRT

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Thr Asn Phe Gly Arg Thr Thr Thr Thr Arg Leu Thr Arg Gly Thr His 30 20 25

Leu Asp Thr Thr Arg Thr Val Pro Gly Pro Ala Thr Glu Asn Glu Leu 40

200

Arg Arg Xaa Ile Arg Asp Thr Leu Arg Thr Thr Lys Asn His Thr Phe 50 55 60

<210> 195

<211> 361

<212> PRT

<213> Homo sapien

<400> 195

Met Ala Ala Glu Gly Trp Ile Trp Arg Trp Gly Trp Gly Arg Arg Cys
1 5 10 15

Leu Gly Arg Pro Gly Leu Leu Gly Pro Gly Pro Gly Pro Thr Thr Pro
20 25 30

Leu Phe Leu Leu Leu Leu Leu Gly Ser Val Thr Ala Asp Ile Thr 35 40 45

Asp Gly Asn Ser Glu His Leu Lys Arg Glu His Ser Leu Ile Lys Pro 50 55 60

Tyr Gln Gly Val Gly Ser Ser Ser Met Pro Leu Trp Asp Phe Gln Gly 65 70 75 80

Ser Thr Met Leu Thr Ser Gln Tyr Val Arg Leu Thr Pro Asp Glu Arg 85 90 95

Ser Lys Glu Gly Ser Ile Trp Asn His Gln Pro Cys Phe Leu Lys Asp 100 105 110

Trp Glu Met His Val His Phe Lys Val His Gly Thr Gly Lys Lys Asn 115 120 125

Leu His Gly Asp Gly Ile Ala Leu Trp Tyr Thr Arg Asp Arg Leu Val 130 135 140

Pro Gly Pro Val Phe Gly Ser Lys Asp Asn Phe His Gly Leu Ala Ile 145 150 155 160

Phe Leu Asp Thr Tyr Pro Asn Asp Glu Thr Thr Glu Arg Val Phe Pro
165 170 175

Tyr Ile Ser Val Met Val Asn Asn Gly Ser Leu Ser Tyr Asp His Ser 180 185 190

Lys Asp Gly Arg Trp Thr Glu Leu Ala Gly Cys Thr Ala Asp Phe Arg 200

Asn Arg Asp His Asp Thr Phe Leu Ala Val Arg Tyr Ser Arg Gly Arg

Leu Thr Val Met Thr Asp Leu Glu Asp Lys Asn Glu Trp Lys Asn Cys 230

Ile Asp Ile Thr Gly Val Arg Leu Pro Thr Gly Tyr Tyr Phe Gly Ala 250 245

Ser Ala Gly Thr Gly Asp Leu Ser Asp Asn His Asp Ile Ile Ser Met 265

Lys Ala Val Pro Ala Asp Gly Gly Ala His Ala Arg Arg Gly Glu His

Arg Leu Asp Gln Asp Arg Ala Gln Arg Gln Leu Pro Gln Val Ala Gln

Arg Cys Val Cys Thr Ala Pro Pro Cys Leu Gly Leu Gly Leu Thr 310 315

Gln Asn Gly Val Lys Pro Ala Trp Arg Val Leu Trp Ser Ser Arg Gly 335 330 325

Cys Gly Gly Cys Gly Leu Gly Ser Trp Ile Ser Pro Val Leu Ala Ser 340 345

Gly Thr Gly Trp Pro Cys Pro Ser Ser

<210> 196

<211> 326

<212> PRT

<213> Homo sapien

<220>

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<222> (313)..(313) <223> X=any amino acid

<400> 196

Gly Gly Ser Gly Arg Glu Glu Arg Arg Met Ala Ala Glu Gly Trp Ile 5

225

- Trp Arg Trp Gly Trp Gly Arg Arg Cys Leu Gly Arg Pro Gly Leu Leu Gly Pro Gly Pro Gly Pro Thr Thr Pro Leu Phe Leu Leu Leu Leu Gly Ser Val Thr Ala Asp Ile Thr Asp Gly Asn Ser Glu His Leu Lys Arg Glu His Ser Leu Ile Lys Pro Tyr Gln Gly Val Gly Ser Ser Ser 70 Met Pro Leu Trp Asp Phe Gln Gly Ser Thr Met Leu Thr Ser Gln Tyr Val Arg Leu Thr Pro Asp Glu Arg Ser Lys Glu Gly Ser Ile Trp Asn His Gln Pro Cys Phe Leu Lys Asp Trp Glu Met His Val His Phe Lys 120 Val His Gly Thr Gly Lys Lys Asn Leu His Gly Asp Gly Ile Ala Leu 135 Trp Tyr Thr Arg Asp Arg Leu Val Pro Gly Pro Val Phe Gly Ser Lys 160 145 150 155 Asp Asn Phe His Gly Leu Ala Ile Phe Leu Asp Thr Tyr Pro Asn Asp 165 Glu Thr Thr Glu Arg Val Phe Pro Tyr Ile Ser Val Met Val Asn Asn 180 Gly Ser Leu Ser Tyr Asp His Ser Lys Asp Gly Arg Trp Thr Glu Leu 195 200 Ala Gly Cys Thr Ala Asp Phe Arg Asn Arg Asp His Asp Thr Phe Leu
- Asp Lys Asn Glu Trp Lys Asn Cys Ile Asp Ile Thr Gly Val Arg Leu 245 250 255

Ala Val Arg Tyr Ser Arg Gly Arg Leu Thr Val Met Thr Asp Leu Glu

230

Pro Thr Gly Tyr Tyr Phe Gly Ala Ser Ala Gly Thr Gly Asp Leu Ser 260

Asp Asn His Asp Ile Ile Ser Met Lys Leu Phe Gln Leu Met Val Glu

His Thr Pro Asp Glu Glu Ser Ile Asp Trp Thr Lys Ile Glu Pro Ser

Val Asn Phe Leu Lys Ser Pro Lys Xaa Ala Cys Ala Gln Pro Arg Pro 305 310 315

Ala Trp Ala Trp Ala Ala 325

<210> 197 <211> 372 <212> PRT <213> Homo sapien

<400> 197

Met Gly Pro Pro Glu Gly Gly Ser Ser Arg Ala Glu Val Ala Glu Arg 5 10

Arg Gly Glu Trp Arg Arg Lys Ala Gly Phe Gly Pro Thr Thr Pro Leu 20 25

Phe Leu Leu Leu Leu Leu Gly Ser Val Thr Ala Asp Ile Thr Asp

Gly Asn Ser Glu His Leu Lys Arg Glu His Ser Leu Ile Lys Pro Tyr

Gln Gly Val Gly Ser Ser Met Pro Leu Trp Asp Phe Gln Gly Ser 70

Thr Met Leu Thr Ser Gln Tyr Val Arg Leu Thr Pro Asp Glu Arg Ser 85

Lys Glu Gly Ser Ile Trp Asn His Gln Pro Cys Phe Leu Lys Asp Trp 1.00 105

Glu Met His Val His Phe Lys Val His Gly Thr Gly Lys Lys Asn Leu 115 120

His Gly Asp Gly Ile Ala Leu Trp Tyr Thr Arg Asp Arg Leu Val Pro

204

130 135 140

Gly Pro Val Phe Gly Ser Lys Asp Asn Phe His Gly Leu Ala Ile Phe 145 150 155 160

Leu Asp Thr Tyr Pro Asn Asp Glu Thr Thr Glu Arg Val Phe Pro Tyr 165 170 175

Ile Ser Val Met Val Asn Asn Gly Ser Leu Ser Tyr Asp His Ser Lys 180 185 190

Asp Gly Arg Trp Thr Glu Leu Ala Gly Cys Thr Ala Asp Phe Arg Asn 195 200 205

Arg Asp His Asp Thr Phe Leu Ala Val Arg Tyr Ser Arg Gly Arg Leu 210 225 220

Thr Val Met Thr Asp Leu Glu Asp Lys Asn Glu Trp Lys Asn Cys Ile 225 230 230 240

Asp Ile Thr Gly Val Arg Leu Pro Thr Gly Tyr Tyr Phe Gly Ala Ser 245 250 255

Ala Gly Thr Gly Asp Leu Ser Asp Asn His Asp Ile Ile Ser Met Lys 260 265 270

Ala Val Pro Ala Asp Gly Gly Ala His Ala Arg Arg Gly Glu His Arg 275 280 285

Leu Asp Gln Asp Arg Ala Gln Arg Gln Leu Pro Gln Val Ala Gln Arg 290 295 300

Gln Arg Gly Arg Pro His Gly Glu Leu Pro Gln Arg Ala Pro Asp Gly 305 310 315 320

Val Ala Gly Val Pro Ala Ala Ala Val Arg Ser Pro Gly His Arg Cys 325 330 335

Leu Arg Arg Gly Gly Gly Arg Gly Val Pro Glu Ala Ala Gly Ala Glu 340 345 350

Gln Ala Leu Leu Ser Gly Ala Ser Gly Gly Ala Cys Pro Trp Ala 355 360 365

Gln Glu Pro Met 370

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Arg	Gly	Glu	Trp 20	Arg	Arg	Lys	Ala	Gly 25	Phe	Gly	Pro	Thr	Thr 30	Pro	Leu
Phe	Leu	Leu 35	Leu	Leu	Leu	Gly	Ser 40	Val	Thr	Ala	Asp	Ile 45	Thr	Asp	Gly
Asn	Ser 50	Glu	His	Leu	Lys	Arg 55	Glu	His	Ser	Leu	Ile 60	Lys	Pro	Tyr	Gln
Gly 65	Val	Gly	Ser	Ser	Ser 70	Met	Pro	Leu	Trp	Asp 75	Phe	Gln	Gly	Ser	Thr 80
Met	Leu	Thr	Ser	Gln 85	Tyr	Val	Arg	Leu	Thr 90	Pro	Asp	Glu	Arg	Ser 95	Lys
Glu	Gly	Ser	Ile 100	Trp	Asn	His	Gln	Pro 105	Cys	Phe	Leu	Lys	Asp 110	Trp	Glu
Met	His	Val 115	His	Phe	Lys	Val	His 120	Gly	Thr	Gly	Lys	Lys 125	Asn	Leu	His
Gly	Asp 130	Gly	Ile	Ala	Leu	Trp 135	Tyr	Thr	Arg	Asp	Arg 140	Leu	Val	Pro	Gly
Pro 145	Val	Phe	Gly	Ser	Lys 150	Asp	Asn	Phe	His	Gly 155		Ala	Ile	Phe	Leu 160
Asp	Thr	Tyr	Pro	Asn 165	Asp	Glu	Thr	Thr	Glu 170	Arg	Val	Phe	Pro	Tyr 175	Ile
Ser	Val	Met	Val 180	Asn	Asn	Gly	Ser	Leu 185	Ser	Tyr	Asp	His	Ser 190	Lys	Asp
Gly	Arg	Trp 195	Thr	Glu	Leu	Ala	Gly 200	Cys	Thr	Ala	Asp	Phe 205	Arg	Asn	Arg

206

Asp His Asp Thr Phe Leu Ala Val Arg Tyr Ser Arg Gly Arg Leu Thr 215

Val Met Thr Asp Leu Glu Asp Lys Asn Glu Trp Lys Asn Cys Ile Asp 230 235

Ile Thr Gly Val Arg Leu Pro Thr Gly Tyr Tyr Phe Gly Ala Ser Ala

Gly Thr Gly Asp Leu Ser Asp Asn His Asp Ile Ile Ser Met Lys Leu

Phe Gln Leu Met Val Glu His Thr Pro Asp Glu Glu Ser Ile Asp Trp 280

Thr Lys Ile Glu Pro Ser Val Asn Phe Leu Lys Ser Pro Lys Asp Asn

Val Asp Asp Pro Thr Gly Asn Phe Arg Ser Gly Pro Leu Thr Gly Trp 315

Arg Val Phe Leu Leu Leu Cys Ala Leu Leu Gly Ile Val Val Cys

Ala Val Val Gly Ala Val Val Phe Gln Lys Arg Gln Glu Arg Asn Lys

Arg Phe Tyr 355

<210> 199

<211> 187 <212> PRT <213> Homo sapien

<400> 199

Met Glu Ala Gly Gly Phe Leu Asp Ser Leu Ile Tyr Gly Ala Cys Val

Val Phe Thr Asn Leu Gly Trp Leu Ser Tyr Gly Ala Leu Lys Gly Asp 25

Gly Ile Leu Ile Val Val Asn Thr Val Gly Ala Ala Leu Gln Thr Leu 35 40

Tyr Ile Leu Ala Tyr Leu His Tyr Cys Pro Arg Lys Arg Val Val Leu 55 50 60

Leu Gln Thr Ala Thr Leu Leu Gly Val Leu Leu Leu Gly Tyr Gly Tyr

Phe Trp Leu Leu Val Pro Asn Pro Glu Ala Arg Leu Gln Gln Leu Gly

Leu Phe Cys Ser Val Phe Thr Ile Ser Met Tyr Leu Ser Pro Leu Ala

Asp Leu Ala Lys Val Ile Gln Thr Lys Ser Thr Gln Cys Leu Ser Tyr 120

Pro Leu Thr Ile Ala Thr Leu Leu Thr Ser Ala Ser Trp Cys Leu Tyr 135

Gly Phe Arg Leu Arg Asp Pro Tyr Ile Met Val Ser Asn Phe Pro Gly 155

Ile Val Thr Ser Phe Ile Arg Phe Trp Leu Phe Trp Lys Tyr Pro Gln 165

Glu Gln Asp Arg Asn Tyr Trp Leu Leu Gln Thr 180

<210> 200 <211> 86 <212> PRT <213> Homo sapien

<400> 200

Ile Gly Phe Glu Arg Arg Pro Gly Arg Tyr Leu Ser Pro Leu Ala Asp

Leu Ala Lys Val Ile Gln Thr Lys Ser Thr Gln Cys Leu Ser Tyr Pro

Leu Thr Ile Ala Thr Leu Leu Thr Ser Ala Ser Trp Cys Leu Tyr Gly

Phe Arg Leu Arg Asp Pro Tyr Ile Met Val Ser Asn Phe Pro Gly Ile 55

Val Thr Ser Phe Ile Arg Phe Trp Leu Phe Trp Lys Tyr Leu Gly Arg 70 75

208

Asp His Ala Lys Pro Ile 85

<210> 201

<211> 85

<212> PRT

<213> Homo sapien

<400> 201

Arg Phe Glu Arg Arg Pro Gly Arg Tyr Leu Ser Pro Leu Ala Asp Leu 1 5 10 15

Ala Lys Val Ile Gln Thr Lys Ser Thr Gln Cys Leu Ser Tyr Pro Leu 20 25 30

Thr Ile Ala Thr Leu Leu Thr Ser Ala Ser Trp Cys Leu Tyr Gly Phe 35 40 45

Arg Leu Arg Asp Pro Tyr Ile Met Val Ser Asn Phe Pro Gly Ile Val 50 60

Thr Ser Phe Ile Arg Phe Trp Leu Phe Trp Lys Tyr Leu Gly Arg Asp 65 70 75 80

His Ala Lys Pro Ile 85

<210> 202

<211> 147

<212> PRT

<213> Homo sapien

<400> 202

Met Lys Gly Glu Val Tyr Pro Phe Gly Ile Val Gly Met Ala Asn Lys 1 5 10 15

Gly Asp Cys Cys Lys Ser Thr Gly Gly Lys Ala Pro Arg Lys Gln Leu 20 25 30

Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ser Thr Gly Gly Val Lys 35 40 45

Lys Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu Arg Glu Ile Arg 50 55 60

Arg Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys Leu Pro Phe Gln 65 70 75 80

Arg Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr Asp Leu Arg Phe

Gln Ser Ala Ala Ile Gly Ala Leu Gln Glu Ala Ser Glu Ala Tyr Leu 105

Val Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile His Ala Lys Arg

Val Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg Arg Ile Arg Gly

Glu Arg Ala 145

<210> 203

<211> 146 <212> PRT <213> Homo sapien

<400> 203

Lys Val Arg Ser Ile His Leu Ala Ser Leu Gly Trp Pro Thr Lys Gly

Ile Ala Cys Lys Ser Thr Gly Gly Lys Ala Pro Arg Lys Gln Leu Ala 25

Thr Lys Ala Ala Arg Lys Ser Ala Pro Ser Thr Gly Gly Val Lys Lys 35 45

Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu Arg Glu Ile Arg Arg 50 55

Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys Leu Pro Phe Gln Arg

Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr Asp Leu Arg Phe Gln

Ser Ala Ala Ile Gly Ala Leu Gln Glu Ala Ser Glu Ala Tyr Leu Val

Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile His Ala Lys Arg Val 115 120 125

Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg Arg Ile Arg Gly Glu

140 135 130

Arg Ala 145

<210> 204 <211> 91 <212> PRT

<213> Homo sapien

<400> 204

Met Arg Arg Arg Ala Gly Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu

Leu Ile Arg Lys Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln 20

Asp Phe Lys Thr Asp Leu Arg Phe Gln Ser Ala Ala Ile Gly Ala Leu

Gln Glu Ala Ser Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn

Leu Cys Ala Ile His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile

Gln Leu Ala Arg Arg Ile Arg Gly Glu Arg Ala 85

<210> 205 <211> 116 <212> PRT <213> Homo sapien

<400> 205

Met Leu Glu Arg Arg Ser Val Met Asp Arg Pro Pro Gly Gln Val Val 10

Arg Pro Asn Asp Glu Val Thr Ala Val Leu Ala Val Gln Thr Glu Leu

Lys Glu Cys Met Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro Leu

Gln Gly Ala Phe Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp Asn 55 50

211

Pro Lys Thr Phe Tyr Trp Asp Phe Tyr Thr Asn Arg Thr Val Gln Ile 65 70 75 80

Ala Ala Val Val Asp Val Ile Arg Glu Leu Gly Ile Cys Pro Asp Asp 85 90 95

Ala Ala Val Ile Pro Ile Lys Asn Asn Arg Phe Tyr Thr Ile Glu Ile
100 105 110

Leu Lys Val Glu 115

<210> 206

<211> 117

<212> PRT

<213> Homo sapien

<400> 206

Asp Ala Met Leu Glu Arg Arg Ser Val Met Asp Pro Pro Gly Gln Val

1 10 15

Val Arg Pro Asn Asp Glu Val Thr Ala Val Leu Ala Val Gln Thr Glu 20 25 30

Leu Lys Glu Cys Met Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro 35 40 45

Leu Gln Gly Ala Phe Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp 50 55 60

Asn Pro Lys Thr Phe Tyr Trp Asp Phe Tyr Thr Asn Arg Thr Val Gln 65 70 75 80

Ile Ala Ala Val Val Asp Val Ile Arg Glu Leu Gly Ile Cys Pro Asp 85 90 95

Asp Ala Ala Val Ile Pro Ile Lys Asn Asn Arg Phe Tyr Thr Ile Glu 100 105 110

Ile Leu Lys Val Glu 115

<210> 207

<211> 168

<212> PRT

<213> Homo sapien

<400> 207

Met Leu Glu Arg Arg Ser Val Met Asp Arg Pro Pro Gly Gln Val Leu
1 5 10 15

Pro Ser Val Phe Ser Ser Met Arg Leu Leu Gln Leu Leu Phe Arg Ala 20 25 30

Ser Pro Ala Thr Leu Leu Leu Val Leu Cys Leu Gln Leu Gly Ala Asn 35 40 45

Lys Ala Gln Asp Asn Thr Arg Lys Ile Ile Ile Lys Asn Phe Asp Ile 50 55 60

Pro Lys Ser Val Arg Pro Asn Asp Glu Val Thr Ala Val Leu Ala Val 65 70 75 80

Gln Thr Glu Leu Lys Glu Cys Met Val Val Lys Thr Tyr Leu Ile Ser 85 90 95

Ser Ile Pro Leu Gln Gly Ala Phe Asn Tyr Lys Tyr Thr Ala Cys Leu 100 105 110

Cys Asp Asp Asn Pro Lys Thr Phe Tyr Trp Asp Phe Tyr Thr Asn Arg 115 120 125

Thr Val Gln Ile Ala Ala Val Val Asp Val Ile Arg Glu Leu Gly Ile 130 135 140

Cys Pro Asp Asp Ala Ala Val Ile Pro Ile Lys Asn Asn Arg Phe Tyr 145 150 155 160

Thr Ile Glu Ile Leu Lys Val Glu 165

<210> 208

<211> 160

<212> PRT

<213> Homo sapien

<400> 208

Trp Ile Arg Pro Gly Arg Tyr Cys Leu Leu Phe Ser Pro Ala Cys Ala 1 5 10 15

Cys Ser Ser Ser Cys Ser Gly Pro Ala Leu Pro Pro Cys Ser Trp Phe 20 25 30

Ser Ala Cys Ser Trp Gly Pro Thr Lys Leu Arg Thr Thr Leu Gly Lys

45 35 40

Ile Ile Lys Asn Phe Asp Ile Pro Lys Ser Val Arg Pro Asn Asp

Glu Val Thr Ala Val Leu Ala Val Gln Thr Glu Leu Lys Glu Cys Met

Val Val Lys Thr Tyr Leu Ile Ser Ser Ile Pro Leu Gln Gly Ala Phe 85

Asn Tyr Lys Tyr Thr Ala Cys Leu Cys Asp Asp Asn Pro Lys Thr Phe 105 100

Tyr Trp Asp Phe Tyr Thr Asn Arg Thr Val Gln Ile Ala Ala Val Val 115 120

Asp Val Ile Arg Glu Leu Gly Ile Cys Pro Asp Asp Ala Ala Val Ile 130

Pro Ile Lys Asn Asn Arg Phe Tyr Thr Ile Glu Ile Leu Lys Val Glu 150 155

<210> 209

<211> 68

<212> PRT <213> Homo sapien

<400> 209

Met Gly Leu Gly Leu Gly Pro Arg Arg Arg Ser Ser Leu Ser Gly 5

Cys Arg Gly Ser Gly Arg Ala Arg Val Gly Val Ala Pro Leu Ser Thr 20

Pro Val Pro Phe Val Ala Ala Ala Leu Val Arg Asp Thr Ala Phe Arg 40 35

Ser Arg Ala Leu Gly Gly Val Lys Cys Asp Ala Ser Ile Ile His Leu

Asp Ala Val Ser 65

<210> 210

<211> 86

<212> PRT

214

<213> Homo sapien

<400> 210

Ala Pro Ala Arg Ala Arg Pro Ser Gly Arg Ala Val Arg Pro Ser Ser

Arg Val Pro Ser Trp Ala Glu Arg Thr Arg Arg Cys Pro Ala Pro Asp

Gln Thr Ser Arg Gly Leu Gly Pro Gly Pro Arg Ala Ala Ser Ala Pro

Val Glu Pro Leu Arg Val Ser Gly Phe Gly Ala Gly Ala Arg Gly Arg

Gly Ser Ser Val His Ala Cys Ser Leu Arg Arg Gly Ser Arg Pro

Gly His Gly Phe Pro Glu

<210> 211 <211> 727

<212> PRT

<213> Homo sapien

<400> 211

Met Leu Met Tyr His Phe Pro Gln Pro Gln Ala Lys Phe Asp Trp Leu

Lys Asn Ile Cys Pro Leu Asn Tyr Ile Trp Gly Gly Ile Tyr Asn Lys 20

Thr Met Lys Asp Phe Met Val Ser Ser Tyr Ile Ile Arg Lys Leu Val

Arg Asn Val Ala Glu Asn Gln Phe Leu Ser Leu Lys Glu Leu Val Tyr

Ile Tyr Lys Gln Lys Leu Gln Glu Lys Asp Ser Leu Ile Phe Lys Ser

Asn Ser Ile Phe Gly Tyr His Ser Arg Lys Gly Lys Tyr Thr Asn Phe 90

Arg Phe Phe Tyr Leu Cys Leu Ser Arg Gly Cys Lys Gln Leu Lys Glu 100 105

Val	Ile	Lys 115	Met	ГÀв	Ser	Ser	Lys 120	Lys	Trp	Leu	Leu	Ile 125	Thr	Trp	ГÀв
Ala	Val 130	Tyr	Ile	Сув	Lys	Lys 135	Ile	Gln	Tyr	Tyr	Asp 140	Leu	His	Gln	Leu
Leu 145	His	Ile	Ile	Tyr	Leu 150	Gly	туг	Tyr	Leu	Trp 155	Tyr	Ser	Leu	Cys	Met 160
Glu	Cys	Гув	Gly	Ile 165	Phe	Lys	Leu	Thr	Arg 170	Ser	Сув	Trp	Ser	Ser 175	Tyr
Asn	Met	Leu	Gln 180	Tyr	Tyr	Гуs	Ile	Glu 185	Met	Lys	Tyr	Phe	Leu 190	Ile	Glu
Gly	Lys	Tyr 195	Lys	Phe	Asn	Ile	Trp 200	Ala	Ile	Glu	Thr	Phe 205	Lys	Leu	Tyr
Phe	Lys 210	Ser	Met	Ile	Leu	Met 215	Tyr	Met	Ile	Leu	Phe 220	Сув	Leu	Сув	Tyr
Ile 225	Asn	Arg	Ile	Arg	Gly 230	Val	Phe	Сув	Asn	Ser 235	Asn	Thr	Leu	Tyr	Ile 240
Pro	Asn	Phe	Ile	Leu 245	Tyr	Glu	Trp	Thr	Phe 250	ГÀв	Ile	Lys	Gly	Ile 255	Сув
Ala	Ser	Arg	Gly 260	Pro	Asn	Leu	Asn	His 265	Glu	Leu	Ile	Сув	Gln 270	Ala	Ser
Авр	Tyr	Arg 275	Lys	Ala	Ser	Leu	Ile 280	Asn	Leu	Glu	Leu	Gly 285	ГÀв	Gly	Ala
Gly	<b>Ъу</b> в 290	Thr	Val	Phe	Сув	Arg 295	Asn	Leu	Leu	Val	Gln 300	Gln	Pro	Phe	ГÀЗ
Leu 305	Asn	Val	Сув	Glu	His 310	Asn	Ser	Asp	Gly	Ile 315	Phe	Ser	Ser	Pro	Ser 320
Leu	Trp	Phe	Val	Gln 325	Leu	Asp	Val	Thr	Val 330	Ala	Val	Ala	Leu	Thr 335	Val
Lys	Сув	Leu	Asn 340	Asp	Asp	Thr	Ile	Met 345	Trp	Ser	Asp	Phe	Glu 350	Met	Arg

Asp	Ser	Ser 355	Gln	Glu	Leu	Ser	Ser 360	Ala	Pro	Ile	Ser	Phe 365	Lys	Ser	Tyr
Ser	Leu 370	Ala	Val	Gln	Ile	Met 375	Ile	Asp	Leu	Phe	Val 380	Thr	Asp	Сув	Arg
Lys 385	Gln	Ser	Leu	Ile	Phe 390	Gln	Tyr	Phe	Thr	Leu 395	ГÀв	Leu	Phe	Thr	Val 400
Val	Thr	Met	Gly	Arg 405	Tyr	Phe	His	Gly	Leu 410	Ser	Ala	Pro	Glu	Arg 415	Leu
Gly	Glu	Tyr	Ser 420	Leu	Leu	Ser	Asp	Lys 425	Thr	Asn	Tyr	Leu	Tyr 430	Met	Ser
Ala	Val	Ala 435	Glu	Gly	Tyr	Thr	Phe 440	Ile	Leu	Lys	Tyr	Val 445	Asn	Asn	Pro
Ser	Asp 450	Tyr	Thr	Asn	Ile	Asp 455	Leu	Ala	Ile	Met	Lys 460	Pro	Glu	Tyr	Arg
Glu 465	Asn	Glu	Leu	Phe	Gln 470	Gly	Gly	Met	Val	Lys 475	Ser	Phe	Phe	Leu	Ala 480
Gly	Cys	Lys	Lys	Leu 485	Leu	Ile	Leu	Phe	Ser 490	Gln	Leu	Val	Gly	Ile 495	Tyr
Glu	Phe	Tyr	<b>L</b> ув 500	Gln	Thr	Ile	Arg	Asn 505	Asp	Ser	Val	Val	Ser 510	Asp	ГÀв
Gln	His	Pro 515	Asn	Ile	Leu	Thr	Leu 520	Leu	Leu	Val	Val	Phe 525	Phe	Lys	Ser
Tyr	Leu 530	Ser	Leu	Thr	Phe	Ser 535	His	Arg	Ile	Ala	Thr 540	Asp	Leu	Met	Arg
Ser 545	Leu	Thr	Asp	Leu	Ile 550	Phe	Leu	Gln	Phe	Gln 555	Tyr	Ile	Phe	Ala	Leu 560
Glu	Ser	Pro	Val	Met 565	Asn	Ile	ГÀЗ	Ile	Tyr 570	Val	Gln	Ser	Phe	Val 575	Asp
Asp	Ile	Asn	Tyr 580	Ile	Ьув	Thr	Phe	Gln 585	Met	Gly	Tyr	Сув.	Ser 590	Ile	Glu

217

Cys Ala Val Phe Tyr Gly Arg Ile Ile Leu Ser Leu Trp Thr Ser Arg

Leu Leu Ser Val Gly Met Lys Ile Asn Leu Leu Gln Ser Asp Phe Leu 615

Gly Ile Asn Ala Val Phe Ile Phe Val Arg Leu Leu Pro Ser Phe Asn 635

Val Ile Leu Asn Phe Leu Trp Ile Tyr Phe Pro Ile His Lys Ile Leu 650

Gln Asn Lys Asn Asp Asn Asn Phe Tyr Thr Phe Tyr Lys Asn Lys Phe

Ile Phe Ser Pro Ser Arg Cys Leu Lys Ile Leu Cys Leu Gly Ile Ser 680

Ile Ser Asn Leu Met Lys Glu Asn Arg Ile Asn Asn Ala Gly Asn Ser 695

Arg Lys Val Ser Ile Leu Ile Arg Cys Gln Thr Asp Ile Ser Cys Glu

Pro Asn Ser Phe Tyr Gly Asn 725

<210> 212

<211> 73 <212> PRT

<213> Homo sapien

<400> 212

Ala Ser Met His Val Phe Ile Phe Val Arg Leu Leu Pro Ser Phe Asn

Val Ile Leu Asn Phe Leu Trp Ile Tyr Phe Pro Ile His Lys Ile Leu

Gln Asn Lys Asn Asp Asn Asn Phe Tyr Thr Phe Tyr Lys Asn Lys Phe

Ile Phe Ser Pro Ser Arg Cys Leu Lys Ile Leu Cys Leu Gly Ile Ser 55

Ile Ser Asn Leu Ile Arg Lys Ile Gly 65

218

<210> 213

<211> 73 <212> PRT <213> Homo sapien

<400> 213

Ala Ser Met His Val Phe Ile Phe Val Arg Leu Pro Ser Phe Asn 10

Val Ile Leu Asn Phe Leu Trp Ile Tyr Phe Pro Ile His Lys Ile Leu 25 30

Gln Asn Lys Asn Asp Asn Asn Phe Tyr Thr Phe Tyr Lys Asn Lys Phe 35

Ile Phe Ser Pro Ser Arg Cys Leu Lys Ile Leu Cys Leu Gly Ile Ser 55 50

Ile Ser Asn Leu Ile Arg Lys Ile Gly 70

<210> 214

<211> 67

<212> PRT

<213> Homo sapien

<400> 214

Met Glu Leu Leu Tyr Trp Leu Leu Glu Gly Asp Ser Glu Asp Lys 5

Glu Asp Ala Thr Gly Asn Val Glu Met Lys Asn Ile Gln Pro Leu Val

Phe Glu Ile Ser Cys Asp Val Phe Gln Ser Arg Cys Lys Glu His Gly 35

Lys Ile Lys Val Leu Glu Trp Phe Lys Tyr Val Leu Gly Ile Pro Val

Tyr Arg Leu

<210> 215

<211> 90

<212> PRT

<213> Homo sapien

219

<400> 215

Thr Lys Gly Phe Leu Gln Met Leu Ala Glu Ile His Pro Lys Ala Gly
1 5 10 15

Leu Gln Ser Leu Gln Phe Ile Met Glu Leu Leu Tyr Trp Leu Leu Glu 20 25 30

Gly Gly Asp Ser Glu Asp Lys Glu Asp Ala Thr Gly Asn Val Glu Met 35 40 45

Lys Asn Ile Gln Pro Leu Val Phe Glu Ile Ser Cys Asp Val Phe Gln 50 60

Ser Arg Cys Lys Glu His Gly Lys Ile Lys Val Leu Glu Trp Phe Lys 65 70 75 80

Tyr Val Leu Gly Ile Pro Val Tyr Arg Leu 85 90

<210> 216

<211> 56

<212> PRT

<213> Homo sapien

<400> 216

Glu Arg Arg Gln Cys Asp Gly Trp Ser Arg Pro Arg Trp Gly Glu Asp 1 5 10 15

Ser Thr Leu Gly Arg Lys Lys Ser Gln Asn Leu Val Ser Phe Leu Thr 20 25 30

Leu Arg Ala Lys Leu Met Gly Thr Ser Ser Pro Ser Leu Cys Pro Gln 35 40 45

Asn Pro Ala Pro Ile Arg Ser Trp 50 55

<210> 217

<211> 46

<212> PRT

<213> Homo sapien

<400> 217

Trp Met Val Ala Ala Arg Trp Gly Glu Asp Ser Thr Leu Gly Arg Lys
1 10 15

Lys Ser Gln Asn Leu Val Ser Phe Leu Thr Leu Arg Pro Thr His Gly

20 25 30

Asp Phe Gln Pro Phe Ser Val Ser Pro Glu Ser Cys Pro His
35 40 45

<210> 218

<211> 154

<212> PRT

<213> Homo sapien

<400> 218

Tyr Asn Ala Ala Arg Ala Ala Gln Cys Glu Trp Ile Gly Arg Pro Gly
1 5 10 15

Arg Tyr Gln Leu Cys Gln Pro Gln Ser Lys Asp Gln Val Arg Trp Gln 20 25 30

Cys Asn Arg Pro Ser Ala Lys His Gly Pro Glu Lys Leu Ser Glu Lys 35 40 45

Phe Gln Arg Phe Thr Pro Phe Thr Leu Gly Lys Glu Phe Lys Glu Gly 50 60

His Ser Tyr Tyr Tyr Ile Ser Lys Pro Ile His Gln His Glu Asp Arg 65 70 75 80

Cys Leu Arg Leu Lys Val Thr Val Ser Gly Lys Ile Ile Thr Val Leu 85 90 95

Arg Pro Met Ser Ile His Arg Arg Asp Leu Gln Gln Met Thr Gln
100 105 110

Arg Cys Gly Phe Tyr Ile Ala Ser Val Thr Val Leu Pro His Ala Ser 115 120 125

Ser His Leu Pro Gly Leu Cys Cys Ser Phe His Phe Cys Cys Cys Lys 130 135 140

Pro Arg Glu Gly Val Cys His Thr Trp Pro

<210> 219

<211> 204

<212> PRT

<213> Homo sapien

<400> 219

His Arg Ser Gln Cys Cys Pro Thr Pro Leu Pro Thr Cys Leu Asp Cys

Ala Ala Pro Ser Thr Ser Ala Ala Ash Pro Val Lys Val Cys Ala 25

Thr Pro Gly Leu Lys Glu Gly Gln Ala Glu Glu Arg Asp Arg His Ser

Lys Pro Val Leu Gly Pro Leu Ser Glu Pro Pro Ala Leu Gly Thr Thr

Pro Thr Thr Gly Ile Ser Tyr His Leu Ala Ala Ser Lys Arg Val Asn

Ile Lys Val Phe Asn Arg Lys Glu Ala Asn Gln Pro Asp Ser Ala Ile

Pro Thr Phe Thr Ser Glu Gly Trp Arg Lys Trp Arg Gln Ser Phe 105

Pro Thr Ile Pro Ala Phe Lys Pro Lys Gln Ala Val Gln Ala Trp

Ser Leu Lys Ala Gln Trp Glu Leu Ser Trp Lys Gly Pro Arg Gly Trp 130 135 140

Ala Lys Leu Val Lys Asp Ala Pro Ser Arg Arg Glu Pro Gly Cys Pro 150 155

Asp Glu Leu Thr Glu Gly Lys Ala Arg Asn Ser Phe Leu Leu Gly Ser 165

Gln Val Gln Glu Arg Gln His Ala Trp Ala Asp Pro Ala Ser Pro Ser 180 185 190

Lys Thr Ser Ser Val Glu Leu Pro Gln Arg Ser Leu 200

<210> 220 <211> 147 <212> PRT

<213> Homo sapien

Met His Ala Arg Ala Ala Pro Gly Gln Glu Tyr Gln Leu Cys Gln Pro

Gln Ser Lys Asp Gln Val Arg Trp Gln Cys Asn Arg Pro Ser Ala Lys 25

His Gly Pro Glu Lys Leu Ser Glu Lys Phe Gln Arg Phe Thr Pro Phe 40

Thr Leu Gly Lys Glu Phe Lys Glu Gly His Ser Tyr Tyr Tyr Ile Ser

Lys Pro Ile His Gln His Glu Asp Arg Cys Leu Arg Leu Lys Val Thr

Val Ser Gly Lys Ile Ile Thr Val Leu Arg Pro Met Ser Ile His Arg

Arg Arg Asp Leu Gln Gln Met Thr Gln Arg Cys Gly Phe Tyr Ile Ala

Ser Val Thr Val Leu Pro His Ala Ser Ser His Leu Pro Gly Leu Cys 120

Cys Ser Phe His Phe Cys Cys Lys Pro Arg Glu Gly Val Cys His 130 . 135

Thr Trp Pro 145

<210> 221

<211> 204 <212> PRT

<213> Homo sapien

<400> 221

His Arg Ser Gln Cys Cys Pro Thr Pro Leu Pro Thr Cys Leu Asp Cys

Ala Ala Pro Ser Thr Ser Ala Ala Ala Asn Pro Val Lys Val Cys Ala

Thr Pro Gly Leu Lys Glu Gly Gln Ala Glu Glu Arg Asp Arg His Ser 35

Lys Pro Val Leu Gly Pro Leu Ser Glu Pro Pro Ala Leu Gly Thr Thr

223

Pro Thr Thr Gly Ile Ser Tyr His Leu Ala Ala Ser Lys Arg Val Asn 70

Ile Lys Val Phe Asn Arg Lys Glu Ala Asn Gln Pro Asp Ser Ala Ile

Pro Thr Phe Thr Ser Glu Gly Trp Arg Lys Lys Trp Arg Gln Ser Phe

Pro Thr Ile Pro Ala Phe Lys Pro Lys Lys Gln Ala Val Gln Ala Trp 120

Ser Leu Lys Ala Gln Trp Glu Leu Ser Trp Lys Gly Pro Arg Gly Trp

Ala Lys Leu Val Lys Asp Ala Pro Ser Arg Arg Glu Pro Gly Cys Pro

Asp Glu Leu Thr Glu Gly Lys Ala Arg Asn Ser Phe Leu Leu Gly Ser 165 170 175

Gln Val Gln Glu Arg Gln His Ala Trp Ala Asp Pro Ala Ser Pro Ser

Lys Thr Ser Ser Val Glu Leu Pro Gln Arg Ser Leu 195 200

<210> 222

<211> 74 <212> PRT

<213> Homo sapien

<400> 222

Met His Ala Arg Ala Ala Pro Gly Gln Ser Tyr Leu Ile Tyr Tyr His

Ser Cys Leu Ser Ala His Ser Pro Gln Ala His Asp Asn Pro Gln Glu

Lys Arg Leu Ala Ala Asp Asp Pro Glu Val Arg Val Leu His Ser Ile 35

Gly His Ser Ala Ala Pro Arg Leu Phe Pro Leu Ala Trp Thr Val Leu 50 55

Leu Leu Pro Leu Leu Leu Gln Thr Pro

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224

<210> 223 <211> 204 <212> PRT <213> Homo sapien

<400> 223

His Arg Ser Gln Cys Cys Pro Thr Pro Leu Pro Thr Cys Leu Asp Cys

Ala Ala Pro Ser Thr Ser Ala Ala Ala Asn Pro Val Lys Val Cys Ala 25

Thr Pro Gly Leu Lys Glu Gly Gln Ala Glu Glu Arg Asp Arg His Ser 35

Lys Pro Val Leu Gly Pro Leu Ser Glu Pro Pro Ala Leu Gly Thr Thr 50

Pro Thr Thr Gly Ile Ser Tyr His Leu Ala Ala Ser Lys Arg Val Asn 70

Ile Lys Val Phe Asn Arg Lys Glu Ala Asn Gln Pro Asp Ser Ala Ile

Pro Thr Phe Thr Ser Glu Gly Trp Arg Lys Lys Trp Arg Gln Ser Phe 105

Pro Thr Ile Pro Ala Phe Lys Pro Lys Lys Gln Ala Val Gln Ala Trp 115

Ser Leu Lys Ala Gln Trp Glu Leu Ser Trp Lys Gly Pro Arg Gly Trp

Ala Lys Leu Val Lys Asp Ala Pro Ser Arg Glu Pro Gly Cys Pro 150

Asp Glu Leu Thr Glu Gly Lys Ala Arg Asn Ser Phe Leu Leu Gly Ser 170

Gln Val Gln Glu Arg Gln His Ala Trp Ala Asp Pro Ala Ser Pro Ser 185

Lys Thr Ser Ser Val Glu Leu Pro Gln Arg Ser Leu 195

225

<210> 224

<211> 895 <212> PRT <213> Homo sapien

<400> 224

Met Gly Cys Trp Leu Ser Trp Ser Lys Thr Glu Gly Cys Arg Ala Pro 5

Gly Val Leu Pro Ile Ser Thr Met Leu Thr Pro Ala Glu Leu Ala Thr 25

Val Val Arg Arg Phe Ser Gln Thr Gly Ile Gln Asp Phe Leu Thr Leu 35 40

Thr Leu Thr Glu Pro Thr Gly Leu Leu Tyr Val Gly Ala Arg Glu Ala 55

Leu Phe Ala Phe Ser Met Glu Ala Leu Glu Leu Gln Gly Ala Ile Ser

Trp Glu Ala Pro Val Glu Lys Lys Thr Glu Cys Ile Gln Lys Gly Lys 85 90

Asn Asn Gln Thr Glu Cys Phe Asn Phe Ile Arg Phe Leu Gln Pro Tyr

Asn Ala Ser His Leu Tyr Val Cys Gly Thr Tyr Ala Phe Gln Pro Lys 120

Cys Thr Tyr Val Asn Met Leu Thr Phe Thr Leu Glu His Gly Glu Phe

Glu Asp Gly Lys Gly Lys Cys Pro Tyr Asp Pro Ala Lys Gly His Ala

Gly Leu Leu Val Asp Gly Glu Leu Tyr Ser Ala Thr Leu Asn Asn Phe 170

Leu Gly Thr Glu Pro Ile Ile Leu Arg Asn Met Gly Pro His His Ser 185

Met Lys Thr Glu Tyr Leu Ala Phe Trp Leu Asn Glu Pro His Phe Val 195 200

Gly Ser Ala Tyr Val Pro Glu Ser Val Gly Ser Phe Thr Gly Asp Asp 210

Asp 225	Lys	Val	Tyr	Phe	Phe 230	Phe	Arg	Glu	Arg	Ala 235	Val	Glu	Ser	Asp	Сув 240
Tyr	Ala	Glu	Gln	Val 245	Val	Ala	Arg	Va1	Ala 250	Arg	Val	Cys	ГÀЗ	Gly 255	Asp
Met	Gly	Gly	Ala 260	Arg	Thr	Leu	Gln	Arg 265	Гуз	Trp	Thr	Thr	Phe 270	Leu	ГÀв
Ala	Arg	Leu 275	Ala	Сув	Ser	Ala	Pro 280	Asn	Trp	Gln	Leu	Tyr 285	Phe	Asn	Gln
Leu	Gln 290		Met	His	Thr	Leu 295	Gln	Asp	Thr	Ser	Trp 300	His	Asn	Thr	Thr
Phe 305		Gly	Val	Phe	Gln 310	Ala	Gln	Trp	Gly	Asp 315	Met	Tyr	Leu	Ser	Ala 320
Ile	Сув	Glu	Туг	Gln 325		Glu	Glu	Ile	Gln 330	Arg	Val	Phe	Glu	Gly 335	Pro
Tyr	Lys	Glu	Туг 340		Glu	Glu	Ala	Gln 345		Trp	Asp	Arg	Tyr 350	Thr	Asp
Pro	Val	. Pro 355		Pro	Arg	Pro	Gly 360		Сув	: Ile	Asn	Asn 365	Trp	His	Arg
Arg	370		, Тух	Thr	Ser	Ser 375		Glu	. Lev	Pro	380	Asn	. Ile	. Leu	Asn
Phe 385		L Lys	s Lys	His	390		ı Met	Glu	ı Glu	1 Gln 395	ı Val	. Gly	Pro	Arg	Trp 400
Set	: Ar	g Pro	) Let	ı Let 405		. Lys	в Був	: Gly	7 Th:	r Asr	n Phe	e Thr	Hi:	415	ı Val
Ala	a As	p Ar	g Val 420		c Gly	, Le	ı Asp	Gly 429		a Thi	с Туз	c Thi	c Val 430	L Lev	ı Phe
Il	e Gl	y Th:		y As	p Gly	y Tr	p Let 440		u Ly	s Ala	a Va	1 Se:	r Len	ı Gly	y Pro

Trp Val His Leu Ile Glu Glu Leu Gln Leu Phe Asp Gln Glu Pro Met

455

450

Arg 465	Ser	Leu	Val	Leu	Ser 470	Gln	Ser	Lys	ГÀв	Leu 475	Leu	Phe	Ala	Gly	Ser 480
Arg	Ser	Gln	Leu	Val 485	Gln	Leu	Pro	Val	Ala 490	Asp	Сув	Met	Lys	Tyr 495	Arg
Ser	Сув	Ala	Авр 500	Сув	Val	Leu	Ala	Arg 505	Asp	Pro	Tyr	Сув	Ala 510	Trp	Ser
Val	Asn	Thr 515	Ser	Arg	Сув	Val	Ala 520	Val	Gly	Gly	His	Ser 525	Gly	Leu	Ser
Trp	Ala 530	Leu	His	Arg	Pro	Gly 535	Pro	Pro	Gly	Leu	Arg 540	Leu	Val	Gly	Ala
Arg 545	Leu	Leu	Met	Tyr	Pro 550	Thr	Ser	Pro	Thr	Arg 555	Ser	Leu	Leu	Ile	Gln 560
His	Val	Met	Thr	Ser 565	Asp	Thr	Ser	Gly	Ile 570	Сув	Asn	Leu	Arg	Gly 575	Ser
ГÀЗ	ГÀв	Gly	Glu 580	Leu	Phe	His	Ser	Arg 585	Arg	Ile	Gly	Leu	Ser 590	Pro	Gly
Pro	Glu	Leu 595	Glu	Phe	Leu	Phe	Ser 600	Ser	Ser	Pro	Ala	Leu 605	Leu	Ser	Сув
Thr	Asn 610	Met	His	Ser	Val	Phe 615	Ser	Ala	Thr	Thr	Val 620	Arg	Pro	Thr	Pro
Lув 625	Asn	Ile	Thr	Val	Val 630	Ala	Gly	Thr	Asp	Leu 635	Val	Leu	Pro	Сув	His 640
Leu	Ser	Ser	Asn	Leu 645	Ala	His	Ala	Arg	Trp 650	Thr	Phe	Gly	Gly	Arg 655	Asp
Leu	Pro	Ala	Glu 660	Gln	Pro	Gly	Ser	Phe 665	Leu	Tyr	Asp	Ala	Arg 670	Leu	Gln
Ala	Leu	Val 675	Val	Met	Ala	Ala	Gln 680	Pro	Arg	His	Ala	Gly 685	Ala	Tyr	His
Сув	Phe 690	Ser	Glu	Glu	Gln	Gly 695	Ala	Arg	Leu	Ala	Ala 700	Glu	Gly	Tyr	Leu

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Val Ala Val Val Ala Gly Pro Ser Val Thr Leu Glu Ala Arg Ala Pro 705 710 715 720

Leu Glu Asn Leu Gly Leu Val Trp Leu Ala Val Val Ala Leu Gly Ala 725 730 735

Val Cys Leu Val Leu Leu Leu Leu Val Leu Ser Leu Arg Arg Leu 740 745 750

Arg Glu Glu Leu Glu Lys Gly Ala Lys Ala Thr Glu Arg Thr Leu Val 755 760 765

Tyr Pro Leu Glu Leu Pro Lys Glu Pro Thr Ser Pro Pro Phe Arg Pro 770 775 780

Cys Pro Glu Pro Asp Glu Lys Leu Trp Asp Pro Val Gly Tyr Tyr 785 790 795 800

Ser Asp Gly Ser Leu Lys Ile Val Pro Gly His Ala Arg Cys Gln Pro 805 810 815

Gly Gly Pro Pro Ser Pro Pro Pro Gly Ile Pro Gly Gln Pro Leu 820 825 830

Pro Ser Pro Thr Arg Leu His Leu Gly Gly Gly Arg Asn Ser Asn Ala 835 840 845

Asn Gly Tyr Val Arg Leu Gln Leu Gly Gly Glu Asp Arg Gly Gly Leu 850 855 860

Gly His Pro Leu Pro Glu Leu Ala Asp Glu Leu Arg Arg Lys Leu Gln 865 870 875 880

Gln Arg Gln Pro Leu Pro Asp Ser Asn Pro Glu Glu Ser Ser Val 885 890 895

<210> 225

<211> 626

<212> PRT

<213> Homo sapien

<400> 225

Arg Gln Trp Ala Ala Gly Gln Arg Arg Lys Gln Arg Arg Gly Ser Glu
1 10 15

Gly Gly Val Gly Val Pro Ser Pro Ala Ala Glu Val Pro Leu Thr Leu 20 25 30

Arg Ala Arg Ala Ile Ser Leu Met Ala Ser Ser Gly Arg Lys Leu Trp Leu Arg Tyr Pro Ser Phe Leu Pro Ala Ala Trp Ile Cys Leu Leu Pro Gly Trp Glu Arg Leu Gly Arg Pro Arg Trp Gly Cys Gln Gly Gln Arg Leu Phe Gln Lys Cys Pro Leu Leu Pro Ile Arg Gly Phe Gly Trp His Leu Leu Val Ala Trp Gly Ala Gly Ser Arg Gly Ala Arg Leu Arg Ala Val Glu Pro Gln Gly Ser Cys Pro Ser Ala Ala Met Leu Thr Pro Ala Glu Leu Ala Thr Val Val Arg Arg Phe Ser Gln Thr Gly Ile Gln Asp Phe Leu Thr Leu Thr Glu Pro Thr Gly Leu Leu Tyr Val Gly Ala Arg Glu Ala Leu Phe Ala Phe Ser Met Glu Ala Leu Glu Leu Gln 170 165 Gly Ala Ile Ser Trp Glu Ala Pro Val Glu Lys Lys Thr Glu Cys Ile Gln Lys Gly Lys Asn Asn Gln Thr Glu Cys Phe Asn Phe Ile Arg Phe 195 Leu Gln Pro Tyr Asn Ala Ser His Leu Tyr Val Cys Gly Thr Tyr Ala 210 Phe Gln Pro Lys Cys Thr Tyr Val Asn Met Leu Thr Phe Thr Leu Glu 225 His Gly Glu Phe Glu Asp Gly Lys Gly Lys Cys Pro Tyr Asp Pro Ala 245 250 Lys Gly His Ala Gly Leu Leu Val Asp Gly Glu Leu Tyr Ser Ala Thr

265

- Leu Asn Asn Phe Leu Gly Thr Glu Pro Ile Ile Leu Arg Asn Met Gly 275 280 285
- Pro His His Ser Met Lys Thr Glu Tyr Leu Ala Phe Trp Leu Asn Glu 290 295 300
- Pro His Phe Val Gly Ser Ala Tyr Val Pro Glu Ser Val Gly Ser Phe 305 310 315 320
- Thr Gly Asp Asp Lys Val Tyr Phe Phe Phe Arg Glu Arg Ala Val 325 330 335
- Glu Ser Asp Cys Tyr Ala Glu Gln Val Val Ala Arg Val Ala Arg Val 340 345 350
- Cys Lys Gly Asp Met Gly Gly Ala Arg Thr Leu Gln Arg Lys Trp Thr 355 360 365
- Thr Phe Leu Lys Ala Arg Leu Ala Cys Ser Ala Pro Asn Trp Gln Leu 370 375 380
- Tyr Phe Asn Gln Leu Gln Ala Met His Thr Leu Gln Asp Thr Ser Trp 385 390 395 400
- His Asn Thr Thr Phe Phe Gly Val Phe Gln Ala Gln Trp Gly Asp Met 405 410 415
- Tyr Leu Ser Ala Ile Cys Glu Tyr Gln Leu Glu Glu Ile Gln Arg Val 420 425 430
- Phe Glu Gly Pro Tyr Lys Glu Tyr His Glu Glu Ala Gln Lys Trp Asp 435 440 445
- Arg Tyr Thr Asp Pro Val Pro Ser Pro Arg Pro Gly Ser Cys Ile Asn 450 455 460
- Asn Trp His Arg Arg His Gly Tyr Thr Ser Ser Leu Glu Leu Pro Asp 465 470 475 480
- Asn Ile Leu Asn Phe Val Lys Lys His Pro Leu Met Glu Glu Gln Val 485 490 495
- Gly Pro Arg Trp Ser Arg Pro Leu Leu Val Lys Lys Gly Thr Asn Phe 500 505 510

231

Thr His Leu Val Ala Asp Arg Val Thr Gly Leu Asp Gly Ala Thr Tyr 515

Thr Val Leu Phe Ile Gly Thr Gly Asp Gly Trp Leu Leu Lys Ala Val 535

Ser Leu Gly Pro Trp Val His Leu Ile Glu Glu Leu Gln Leu Phe Asp 550

Gln Glu Pro Met Arg Ser Leu Val Leu Ser Gln Ser Lys Lys Leu Leu 570

Phe Ala Gly Ser Arg Ser Gln Leu Val Gln Leu Pro Val Ala Asp Cys 580

Met Lys Tyr Arg Ser Cys Ala Asp Cys Val Leu Ala Arg Asp Pro Tyr

Cys Ala Trp Ser Val Asn Thr Ser Arg Cys Val Ala Val Gly Gly His 615

Ser Gly 625

<210> 226

<211> 146 <212> PRT <213> Homo sapien

<400> 226

Ser Val Thr Asp Phe Phe Gln Ala Asp Gln Gln Val Val Val Glu

Gly Leu Cys Pro Gly Trp Gly Asp Ala Leu Asn His His Asn Leu Leu 25

Val Cys Ser Val Thr Asp Phe Tyr Pro Gly Gln Ile Lys Val Arg Trp

Phe Arg Asn Asp Gln Glu Glu Thr Ala Gly Val Val Ser Thr Pro Leu

Ile Arg Asn Gly Asp Trp Thr Phe Gln Ile Leu Val Met Leu Glu Met 70 65

Thr Pro Gln Arg Gly Asp Val Tyr Thr Cys His Val Glu His Pro Ser 85 90

Leu Gln Ser Pro Ile Thr Val Glu Trp Arg Ala Gln Ser Glu Ser Ala 100 105

Gln Ser Lys Met Leu Ser Gly Val Gly Phe Val Leu Gly Leu Ile

Phe Leu Gly Leu Gly Leu Ile Ile Arg Gln Arg Ser Gln Lys Gly Leu

Leu His 145

<210> 227

<211> 144 <212> PRT <213> Homo sapien

<400> 227

Gln Ile Ser Ile Gln Ala Asp Gln Gln Val Val Val Glu Gly Leu

Cys Pro Gly Trp Gly Asp Ala Leu Asn His His Asn Leu Leu Val Cys

Ser Val Thr Asp Phe Tyr Pro Gly Gln Ile Lys Val Arg Trp Phe Arg 40

Asn Asp Gln Glu Glu Thr Ala Gly Val Val Ser Thr Pro Leu Ile Arg

Asn Gly Asp Trp Thr Phe Gln Ile Leu Val Met Leu Glu Met Thr Pro

Gln Arg Gly Asp Val Tyr Thr Cys His Val Glu His Pro Ser Leu Gln

Ser Pro Ile Thr Val Glu Trp Arg Ala Gln Ser Glu Ser Ala Gln Ser

Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Ile Phe Leu 115 120

Gly Leu Gly Leu Ile Ile Arg Gln Arg Ser Gln Lys Gly Leu Leu His 130 135

233

<210> 228

<211> 34 <212> PRT <213> Homo sapien

<400> 228

Ala Ala Ala Tyr Tyr Tyr Tyr Cys Ser Glu Phe Lys Leu Leu Thr

Met Tyr Gly Asp Met Trp Gly Glu Asp Gln Leu Gly Ala Trp Ala Leu 20 25

Thr Glu

<210> 229

<211> 46

<212> PRT

<213> Homo sapien

<400> 229

Arg Pro Pro Thr Thr Thr Thr Ala Arg Ile Gln Ala Ser Asn Asp 10

Val Arg Gly His Val Gly Arg Gly Pro Ala Gly Cys Leu Gly Ile Asp 25

Arg Met Met Val Val Leu Tyr His Leu Ile Asn Lys Lys 35

<210> 230

<211> 83

<212> PRT

<213> Homo sapien

<400> 230

Ala Lys Cys Cys Leu Glu Gln Gly Glu Val Leu Lys Leu Leu Ser Ser

Ala Ala Ser Pro Leu Arg Lys Pro Leu Cys His Gln Tyr His Glu Ala 25

Leu Arg Asp Cys Pro Val Ser Pro Arg Ala Ser Ser Cys Leu Leu Leu 45 40 35

Ser Ser Thr Leu Ser Thr Lys Phe Gln Thr Lys Arg Gly Lys Gln Val 50 55

234

Cys Ala Asp Pro Ser Glu Ser Trp Val Gln Glu Tyr Val Tyr Asp Leu 65 70 75 80

Glu Leu Asn

<210> 231

<211> 81

<212> PRT

<213> Homo sapien

<220>

<221> MISC\_FEATURE

<222> (6)..(7)

<223> X=any amino acid

<400> 231

Met Leu Ser Arg Ala Xaa Xaa Val Leu Lys Leu Leu Ser Ser Ala Ala 1 5 10 15

Ser Pro Leu Arg Lys Pro Leu Cys His Gln Tyr His Glu Ala Leu Arg 20 25 30

Asp Cys Pro Val Ser Pro Arg Ala Ser Ser Cys Leu Leu Ser Ser 35 40 45

Thr Leu Ser Thr Lys Phe Gln Thr Lys Arg Gly Lys Gln Val Cys Ala 50 55 60

Asp Pro Ser Glu Ser Trp Val Gln Glu Tyr Val Tyr Asp Leu Glu Leu 65 70 75 80

Asn

<210> 232

<211> 305

<212> PRT

<213> Homo sapien

<400> 232

Met Asp Arg Ser Gly Gly Ile Thr Glu Ala Arg Ser Ser Ala His Asp 1 5 10 15

Leu Tyr Pro Thr Tyr Ser Asn Phe His Ser Ser Pro Cys Pro Arg Ser 20 25 30

Arg Val Leu Tyr Gln Pro Phe Ile Leu Thr Arg Phe Ser Thr Met Ala

40 45 35 Phe Asn Lys Val His Val Phe Leu Val Lys Ala Ala Glu Lys Lys Lys Lys Asn Lys Thr Lys Lys Phe Phe Gly Arg Leu Gly Pro Ser Arg 70 75 Lys Val Phe Lys Pro His Phe Cys Trp Gly Gly Ala Pro Arg Asn 85 90 Ser Lys Val Asn His Trp Ala Gln Arg Gly Trp Pro Lys Glu Arg Ala 105 100 Thr Gly Trp Pro Ala Asp Arg Gly Ala Gly Cys Leu Thr Pro Asn Lys 120 125 Lys Arg Ala Gly Gly Arg His Arg Asp Val Phe Ser Gly Thr Thr Asn Pro Glu Arg Glu Arg Leu Gly Gly Gln Lys Gly Leu Pro His Gln Gly Gly Ile Pro Arg Arg Gln Ser Pro Asn Thr Leu Tyr Arg Ala Ala Leu 165 170 Val Glu Lys Asp Lys Thr Asp Asp Leu Glu His Arg Gln Gly Arg Arg 185 Lys His Ile Thr His Arg Arg Pro Arg His Thr Met Gln Ser Thr Thr Thr Ala Glu Ile Lys Arg Lys Arg Lys Gly Arg Lys Arg Ala Glu Lys Tyr Gln Arg Gln Gln Thr Lys Thr Arg Gly Arg Ser Gly Thr Gln Glu Asn Arg Gln Arg Lys Lys Asn Glu Glu Val Gly Glu Arg Thr Arg Arg 250 255 245 Gly Asp Lys Lys Lys Gln Arg Thr Arg Arg Arg Thr Ser Lys Thr 265 260 Tyr Arg Arg Lys Gln Gly Lys His Glu Glu Lys Lys Thr Arg Arg Arg

280

285

Glu Glu Arg Asp Lys Trp Arg Ala Gly Ala Arg Ser Ser Glu Gly Lys 295

Thr 305

<210> 233

<211> 155

<212> PRT <213> Homo sapien

<400> 233

Asn Asp Arg Gly Lys Glu Val Ser Leu Ser Thr Val Pro Ala Ser Gly 5

His His Ser Gly Pro Ser Leu His Ala Glu Asn His Thr Ser Gln Thr 20

Phe Thr Gln His Phe Leu Pro Gln Ser Gln Lys Met His Lys Glu Glu 40

His Glu Val Ala Val Leu Gly Ala Pro Pro Ser Thr Ile Leu Pro Arg 55

Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser Val Pro Asp His Val 75

Val Trp Ser Leu Phe Asn Thr Leu Phe Leu Asn Trp Cys Cys Leu Gly 85

Phe Ile Ala Phe Ala Tyr Ser Val Lys Ser Arg Asp Arg Lys Met Val

Gly Asp Val Thr Gly Ala Gln Ala Tyr Ala Ser Thr Ala Lys Cys Leu 120

Asn Ile Trp Ala Leu Ile Leu Gly Ile Leu Met Thr Ile Leu Leu Ile

Val Ile Pro Val Leu Ile Phe Gln Ala Tyr Gly 150

<210> 234

<211> 140

<212> PRT

<213> Homo sapien

<400> 234

Met Ala Leu Pro Glu Ser Glu Lys Gly Thr His Gln Val Ile Val Gln

Pro Gln Trp Trp Val Glu Asn Ser Leu Cys Trp Ala Lys Ala Glu Val

Met Asp Val Ala Pro Arg Leu Leu Glu Met Ser Asp Ala Trp Val Met

Lys Cys Gly Gly Trp Trp Ser Leu Ile Ser Gly Ala Gly Arg Ala Asn 50 55 60

Glu Glu Pro Val Cys His Ser Thr Arg Leu Ser Cys Trp Gly Ile Leu 70

Val Pro Ser Pro Ser Pro Leu Pro Gln Ser Arg Asp Arg Lys Met Val

Gly Asp Val Asn Arg Gly Pro Gln Ala Tyr Ala Ser Thr Ala Lys Cys 105

Leu Asn Ile Trp Ala Leu Ile Leu Gly Ile Leu Met Thr Ile Leu Leu

Ile Val Ile Pro Val Leu Ile Phe Gln Ala Tyr Gly 130 135

<210> 235

<211> 120

<212> PRT

<213> Homo sapien

<220>

<221> MISC\_FEATURE

<222> (105)..(105)

<223> X=any amino acid

<400> 235

Asn Asp Arg Gly Lys Glu Val Ser Leu Ser Thr Val Pro Ala Ser Gly

His His Ser Gly Pro Ser Leu His Ala Glu Asn His Thr Ser Gln Thr 20

Phe Thr Gln His Phe Leu Pro Gln Ser Gln Lys Met His Lys Glu Glu

45 40 35

His Glu Val Ala Val Leu Gly Ala Pro Pro Ser Thr Ile Leu Pro Arg 55

Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser Val Pro Asp His Val

Val Trp Ser Leu Phe Asn Thr Leu Phe Leu Asn Trp Cys Cys Leu Gly 90 85

Phe Ile Ala Phe Ala Tyr Ser Val Xaa Thr Gly Thr His Ala Leu Pro 100

Glu Ser Glu Lys Gly Thr His Arg 115

<210> 236

<211> 157

<212> PRT

<213> Homo sapien

<400> 236

Asn Asp Arg Gly Lys Glu Val Ser Leu Ser Thr Val Pro Ala Ser Gly

His His Ser Gly Pro Ser Leu His Ala Glu Asn His Thr Ser Gln Thr 25 20

Phe Thr Gln His Phe Leu Pro Gln Ser Gln Lys Met His Lys Glu Glu 35

His Glu Val Ala Val Leu Gly Ala Pro Pro Ser Thr Ile Leu Pro Arg 55 50

Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser Val Pro Asp His Val 70 65

Val Trp Ser Leu Phe Asn Thr Leu Phe Leu Asn Trp Cys Cys Leu Gly

Phe Ile Ala Phe Ala Tyr Ser Val Lys Val Arg Met Ala Leu Ala Glu 105

Ile Gln Gly Val Pro Val Ser Leu Gly Leu His Leu Pro Thr Cys Cys 120 115

Leu Gly Trp Gly Leu Val Cys Pro Cys Asp Cys Glu Phe Val Cys Thr 130 140

Ser Ala Pro Cys Val Leu Thr Ser Val Ala Leu Ser Val 145 150

<210> 237 <211> 66 <212> PRT <213> Homo sapien

<400> 237

Met His Lys Glu Glu His Glu Val Ala Val Leu Gly Ala Pro Pro Ser

Thr Ile Leu Pro Arg Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser 25

Val Pro Asp His Val Val Trp Ser Leu Phe Asn Thr Leu Phe Met Asn 40

Pro Cys Cys Leu Asn Trp Cys Cys Leu Gly Phe Asn Ser Ile Arg Leu 55

Thr Pro 65

<210> 238 <211> 105 <212> PRT <213> Homo sapien

<400> 238

Asn Asp Arg Gly Lys Glu Val Ser Leu Ser Thr Val Pro Ala Ser Gly

His His Ser Gly Pro Ser Leu His Ala Glu Asn His Thr Ser Gln Thr 20

Phe Thr Gln His Phe Leu Pro Gln Ser Gln Lys Met His Lys Glu Glu 40 35

His Glu Val Ala Val Leu Gly Ala Pro Pro Ser Thr Ile Leu Pro Arg 55 60 50

Ser Thr Val Ile Asn Ile His Ser Glu Thr Ser Val Pro Asp His Val 75 70

240

Val Trp Ser Leu Phe Asn Thr Leu Phe Leu Asn Trp Cys Cys Leu Gly

Phe Ile Ala Phe Ala Tyr Ser Val Ser 100

<210> 239 <211> 238 <212> PRT <213> Homo sapien

<220>

<221> MISC\_FEATURE

<222> (74)..(74)

<223> X=any amino acid

<220>

<221> MISC\_FEATURE
<222> (81)..(81)
<223> X=any amino acid

<220>

<221> MISC\_FEATURE <222> (87)..(87) <223> X=any amino acid

<220>

<221> MISC\_FEATURE

<222> (104)..(104)

<223> X=any amino acid

<220>

<221> MISC\_FEATURE

<222> (112)..(112) <223> X=any amino acid

<400> 239

Gln Ile Asn Pro Ala Ser Thr Leu Tyr Ser Asp His Leu Ser Tyr Phe 15

Cys Phe Ile Gly Pro Phe Ile Val Leu Ala Leu Phe His Gly Lys Phe 25 20

Ile Asp Thr Gly Phe Ser Leu Pro Phe Tyr Gln Pro Ile Leu Ser Lys 40 35

Lys Leu Thr Ile Lys Asp Leu Glu Ser Ile Asp Thr Glu Cys Tyr Tyr 50 55

Ser Pro Ile Trp Ile Arg Asp Asn His Xaa Glu Glu Cys Gly Leu Glu 70

Xaa Tyr Phe Ser Val Asp Xaa Glu Ile Leu Gly Lys Val Thr Ser His

Asp Leu Lys Leu Gly Gly Ser Xaa Ile Leu Val Thr Glu Glu Asn Xaa

Asp Glu Tyr Ile Gly Leu Met Thr Glu Trp Arg Phe Ser Arg Gly Val 120

Gln Glu Gln Thr Lys Ala Phe Leu Asp Gly Phe Asn Glu Val Val Pro 130

Leu Gln Trp Leu Gln Tyr Phe Asp Glu Lys Glu Leu Glu Val Met Leu 155

Cys Gly Met Gln Glu Val Asp Leu Ala Asp Trp Gln Arg Asn Thr Val

Tyr Arg His Tyr Thr Arg Asn Ser Lys Gln Ile Ile Trp Phe Trp Gln 185

Phe Val Lys Glu Thr Asp Asn Glu Val Arg Met Arg Leu Leu Gln Phe 200

Val Thr Gly Thr Cys Arg Leu Pro Leu Gly Gly Phe Ala Glu Leu Met 210

Gly Lys Cys Asn Phe Thr Val Ile Ser Leu Tyr Val Ile Leu 230 235 225

<210> 240 <211> 238

<212> PRT

<213> Homo sapien

<400> 240

Gln Ile Asn Pro Ala Ser Thr Leu Tyr Ser Asp His Leu Ser Tyr Phe 5

Cys Phe Ile Gly Pro Phe Ile Val Leu Ala Leu Phe His Gly Lys Phe 25 20

242

Ile Asp Thr Gly Phe Ser Leu Pro Phe Tyr Gln Pro Ile Leu Ser Lys 35

Lys Leu Thr Ile Lys Asp Leu Glu Ser Ile Asp Thr Glu Cys Tyr Tyr 55

Ser Pro Ile Trp Ile Arg Asp Asn His Pro Glu Glu Cys Gly Leu Glu

Lys Tyr Phe Ser Val Asp Leu Glu Ile Leu Gly Lys Val Thr Ser His

Asp Leu Lys Leu Gly Gly Ser Asn Ile Leu Val Thr Glu Glu Asn Gln 100

Asp Glu Tyr Ile Gly Leu Met Thr Glu Trp Arg Phe Ser Arg Gly Val

Gln Glu Gln Thr Lys Ala Phe Leu Asp Gly Phe Asn Glu Val Val Pro 135

Leu Gln Trp Leu Gln Tyr Phe Asp Glu Lys Glu Leu Glu Val Met Leu

Cys Gly Met Gln Glu Val Asp Leu Ala Asp Trp Gln Arg Asn Thr Val 170

Tyr Arg His Tyr Thr Arg Asn Ser Lys Gln Ile Ile Trp Phe Trp Gln 185 180

Phe Val Lys Glu Thr Asp Asn Glu Val Arg Met Arg Leu Leu Gln Phe 195

Val Thr Gly Thr Cys Arg Leu Pro Leu Gly Gly Phe Ala Glu Leu Met 215 210

Gly Lys Cys Asn Phe Thr Val Ile Ser Leu Tyr Val Ile Leu 235 230 225

<210> 241

<211> 656

<212> PRT <213> Homo sapien

<400> 241

Leu Val Arg Pro Arg Gln Gly Arg Arg Arg Pro Cys Arg Arg Arg Glu 5

Leu	Trp	Val	Ser 20	Arg	Phe	Gly	Ser	Ala 25	Thr	Arg	Gln	Val	Asp 30	Ser	Glı
Ser	Ala	Ser 35	Val	Val	Gly	Lys	Arg 40	Pro	Pro	Phe	His	Gly 45	Thr	Pro	Sei
Thr	Met 50	Ser	Ser	Pro	Ala	Ser 55	Thr	Pro	Ser	Arg	Arg 60	Gly	Ser	Arg	Arg
Gly 65	Arg	Ala	Thr	Pro	Ala 70	Gln	Thr	Pro	Arg	Ser 75	Glu	Asp	Ala	Arg	Sei 80
Ser	Pro	Ser	Gln	Arg 85	Arg	Arg	Gly	Glu	Asp 90	Ser	Thr	Ser	Thr	Gly 95	Glı
Leu	Gln	Pro	Met 100	Pro	Thr	Ser	Pro	Gly 105	Val	Asp	Leu	Gln	Ser 110	Pro	Ala
Ala	Gln	Asp 115	Val	Leu	Phe	Ser	Ser 120	Pro	Pro	Gln	Met	His 125	Ser	Ser	Ala
Ile	Pro 130	Leu	Asp	Phe	Asp	Val 135	Ser	Ser	Pro	Leu	Thr 140	Tyr	Gly	Thr	Pro
Ser 145	Ser	Arg	Val	Glu	Gly 150	Thr	Pro	Arg	Ser	Gly 155	Val	Arg	Gly	Thr	Pro 160
Val	Arg	Gln	Arg	Pro 165	Авр	Leu	Gly	Ser	Ala 170	Gln	Lys	Gly	Leu	Gln 175	Val
Asp	Leu	Gln	Ser 180	Asp	Gly	Ala	Ala	Ala 185	Glu	Asp	Ile	Val	Ala 190	Ser	Glu
Gln	Ser	Leu 195	Gly	Gln	Lys	Leu	Val 200	Ile	Trp	Gly	Thr	Asp 205	Val	Asn	Val
Ala	Ala 210	Сув	ГÀЗ	Glu	Asn	Phe 215	Gln	Arg	Phe	Leu	Gln 220	Arg	Phe	Ile	Asp
Pro 225	Leu	Ala	Lys	Glu	Glu 230	Glu	Asn	Val	Gly	Ile 235	Asp	Ile	Thr	Glu	Pro 240
Leu	Tyr	Met	Gln	Arg 245	Leu	Gly	Glu	Ile	Asn 250	Val	Ile	Gly	Glu	Pro 255	Phe

- Leu Asn Val Asn Cys Glu His Ile Lys Ser Phe Asp Lys Asn Leu Tyr 260 265 270
- Arg Gln Leu Ile Ser Tyr Pro Gln Glu Val Ile Pro Thr Phe Asp Met 275 280 285
- Ala Val Asn Glu Ile Phe Phe Asp Arg Tyr Pro Asp Ser Ile Leu Glu 290 295 300
- His Gln Ile Gln Val Arg Pro Phe Asn Ala Leu Lys Thr Lys Asn Met 305 310 315 320
- Arg Asn Leu Asn Pro Glu Asp Ile Asp Gln Leu Ile Thr Ile Ser Gly 325 330 335
- Met Val Ile Arg Thr Ser Gln Leu Ile Pro Glu Met Gln Glu Ala Phe 340 345 350
- Phe Gln Cys Gln Val Cys Ala His Thr Thr Arg Val Glu Met Asp Arg 355 360 365
- Gly Arg Ile Ala Glu Pro Ser Val Cys Gly Arg Cys His Thr Thr His 370 375 380
- Ser Met Ala Leu Ile His Asn Arg Ser Leu Phe Ser Asp Lys Gln Met 385 390 395 400
- Ile Lys Leu Gln Glu Ser Pro Glu Asp Met Pro Ala Gly Gln Thr Pro
  405 410 415
- His Thr Val Ile Leu Phe Ala His Asn Asp Leu Val Asp Lys Val Gln 420 425 430
- Pro Gly Asp Arg Val Asn Val Thr Gly Ile Tyr Arg Ala Val Pro Ile 435 440 445
- Arg Val Asn Pro Arg Val Ser Asn Val Lys Ser Val Tyr Lys Thr His 450 460
- Ile Asp Val Ile His Tyr Arg Lys Thr Asp Ala Lys Arg Leu His Gly
  465 470 475 480
- Leu Asp Glu Glu Ala Glu Gln Lys Leu Phe Ser Glu Lys Arg Val Glu 485 490 495

245

Leu Leu Lys Glu Leu Ser Arg Lys Pro Asp Ile Tyr Glu Arg Leu Ala
500 505 510

Ser Ala Leu Ala Pro Ser Ile Tyr Glu His Glu Asp Ile Lys Lys Gly 515 520 525

Ile Leu Leu Gln Leu Phe Gly Gly Thr Arg Lys Asp Phe Ser His Thr 530 535 540

Gly Arg Gly Lys Phe Arg Ala Glu Ile Asn Ile Leu Leu Cys Gly Asp 545 550 560

Pro Gly Thr Ser Lys Ser Gln Leu Leu Gln Tyr Val Tyr Asn Leu Val 565 570 575

Pro Arg Gly Gln Tyr Thr Ser Gly Lys Gly Ser Ser Ala Val Gly Leu 580 585 590

Thr Ala Tyr Val Met Lys Asp Pro Glu Thr Arg Gln Leu Val Leu Gln 595 600 605

Thr Gly Ala Leu Val Leu Ser Asp Asn Gly Ile Cys Cys Ile Asp Glu 610 615 620

Phe Asp Lys Met Asn Glu Ser Thr Arg Ser Val Leu His Glu Val Met 625 630 630 640

Glu Gln Gln Thr Leu Ser Ile Ala Lys Gly Glu Ser Pro Ser Pro Pro 645 650 655

<210> 242

<211> 918

<212> PRT

<213> Homo sapien

<400> 242

Met Pro Thr Ser Pro Gly Val Asp Leu Gln Ser Pro Ala Ala Gln Asp 1 5 10 15

Val Leu Phe Ser Ser Pro Pro Gln Met His Ser Ser Ala Ile Pro Leu 20 25 30

Asp Phe Asp Val Ser Ser Pro Leu Thr Tyr Gly Thr Pro Ser Ser Arg
35 40 45

Val Glu Gly Thr Pro Arg Ser Gly Val Arg Gly Thr Pro Val Arg Gln 50 55 60

Arg 65	Pro	Asp	Leu	Gly	Ser 70	Ala	Gln	Lys	Gly	Leu 75	Gln	Val	Asp	Leu	Gln 80
Ser	Asp	Gly	Ala	Ala 85	Ala	Glu	Asp	Ile	Val 90	Ala	Ser	Glu	Gln	Ser 95	Leu
Gly	Gln	Lys	Leu 100	Val	Ile	Trp	Gly	Thr 105	Asp	Val	Asn	Val	Ala 110	Ala	Сув
Lys	Glu	Asn 115	Phe	Gln	Arg	Phe	Leu 120	Gln	Arg	Phe	Ile	Asp 125	Pro	Leu	Ala
ГЛЗ	Glu 130	Glu	Glu	Asn	Val	Gly 135	Ile	qaA	Ile	Thr	Glu 140	Pro	Leu	Tyr	Met
Gln 145	Arg	Leu	Gly	Glu	Ile 150	Asn	Val	Ile	Gly	Glu 155	Pro	Phe	Leu	Asn	Val 160
Asn	Cys	Glu	His	Ile 165	ГЛE	Ser	Phe	Asp	Lys 170	Asn	Leu	Tyr	Arg	Gln 175	Leu
Ile	Ser	Tyr	Pro 180	Gln	Glu	Val	Ile	Pro 185	Thr	Phe	Asp	Met	Ala 190	Val	Asn
Glu	Ile	Phe 195		Asp	Arg	Tyr	Pro 200	Asp	Ser	Ile	Leu	Glu 205	His	Gln	Ile
Gln	Val 210		Pro	Phe	Asn	Ala 215	Leu	Lys	Thr	Lys	Asn 220	Met	Arg	Asn	Leu
Asn 225		Glu	Asp	Ile	Asp 230		Leu	Ile	Thr	Ile 235	Ser	Gly	Met	Val	Ile 240
Arg	Thr	Ser	Gln	Leu 245		Pro	Glu	Met	Gln 250		Ala	Phe	Phe	Gln 255	Сув
Gln	. <b>V</b> al	Сув	Ala 260		Thr	Thr	Arg	Val 265		. Met	Asp	Arg	Gly 270		Ile
Ala	Glu	275		· Val	. Сув	Gly	Arg 280		His	Thr	Thr	His 285	Ser	Met	Ala
Leu	11e		a Asr	Arg	ser	Leu 295		Ser	. Yeb	. Lys	Gln 300		Ile	Lys	Leu

Gln	Glu	Ser	Pro	Glu	Asp	Met	Pro	Ala	Gly	Gln	Thr	Pro	His	Thr	Val
305					310					315					320

- Ile Leu Phe Ala His Asn Asp Leu Val Asp Lys Val Gln Pro Gly Asp 325 330 335
- Arg Val Asn Val Thr Gly Ile Tyr Arg Ala Val Pro Ile Arg Val Asn 340 345 350
- Pro Arg Val Ser Asn Val Lys Ser Val Tyr Lys Thr His Ile Asp Val 355 360 365
- Ile His Tyr Arg Lys Thr Asp Ala Lys Arg Leu His Gly Leu Asp Glu 370 375 380
- Glu Ala Glu Gln Lys Leu Phe Ser Glu Lys Arg Val Glu Leu Leu Lys 385 390 395 400
- Glu Leu Ser Arg Lys Pro Asp Ile Tyr Glu Arg Leu Ala Ser Ala Leu 405 410 415
- Ala Pro Ser Ile Tyr Glu His Glu Asp Ile Lys Lys Gly Ile Leu Leu 420 425 430
- Gln Leu Phe Gly Gly Thr Arg Lys Asp Phe Ser His Thr Gly Arg Gly
  435 440 445
- Lys Phe Arg Ala Glu Ile Asn Ile Leu Leu Cys Gly Asp Pro Gly Thr 450 455 460
- Ser Lys Ser Gln Leu Leu Gln Tyr Val Tyr Asn Leu Val Pro Arg Gly
  465 470 475 480
- Gln Tyr Thr Ser Gly Lys Gly Ser Ser Ala Val Gly Leu Thr Ala Tyr 485 490 495
- Val Met Lys Asp Pro Glu Thr Arg Gln Leu Val Leu Gln Thr Gly Ala 500 505 510
- Leu Val Leu Ser Asp Asn Gly Ile Cys Cys Ile Asp Glu Phe Asp Lys 515 520 525
- Met Asn Glu Ser Thr Arg Ser Val Leu His Glu Val Met Glu Gln Gln 530 535 540

248

Thr Leu Ser Ile Ala Lys Gly Glu Ile Ala Phe Ser Thr Val Asn Met 545 550 555 560

Asp Val Phe Lys Ile Cys Gly Pro Leu Lys Asp Arg Val Cys Gly Thr 565 570 575

Val Leu Cys Tyr Leu Gly Ser Asn Phe Gly Glu Ile Asp Lys Cys Phe 580 585 590

Pro His His Ile Ser Ala Lys Ser Gln His Val Phe Tyr Arg Val Ser 595 600 605

Arg Phe Val Phe Ile Ala Val Leu Ala Leu Asn Cys Pro Lys Ala Leu 610 615 620

Ala Arg Cys Leu Leu Pro Glu Lys Asp Val Val Ile Ala His Ile His 625 630 635 640

Leu Asn Ser Val Leu Gly Met Asn Leu Arg Thr Gly Leu Ile Gln Ala 645 650 655

Gly Ile Ile Cys Gln Leu Asn Ala Arg Thr Ser Val Leu Ala Ala Ala 660 665 670

Asn Pro Ile Glu Ser Gln Trp Asn Pro Lys Lys Thr Thr Ile Glu Asn 675 680 685

Ile Gln Leu Pro His Thr Leu Leu Ser Arg Phe Asp Leu Ile Phe Leu 690 695 700

Met Leu Asp Pro Gln Asp Glu Ala Tyr Asp Arg Arg Leu Ala His His 705 710 715 720

Leu Val Ala Leu Tyr Tyr Gln Ser Glu Glu Gln Ala Glu Glu Glu Leu 725 730 735

Leu Asp Met Ala Val Leu Lys Asp Tyr Ile Ala Tyr Ala His Ser Thr 740 745 750

Ile Met Pro Arg Leu Ser Glu Glu Ala Ser Gln Ala Leu Ile Glu Ala 755 760 765

Tyr Val Asp Met Arg Lys Ile Gly Ser Ser Arg Gly Met Val Ser Ala 770 775 780

Tyr Pro Arg Gln Leu Glu Ser Leu Ile Arg Leu Ala Glu Ala His Ala

249

785 790 795 800

Lys Val Arg Leu Ser Asn Lys Val Glu Ala Ile Asp Val Glu Glu Ala 805 810 815

Lys Arg Leu His Arg Glu Ala Leu Lys Gln Ser Ala Thr Asp Pro Arg 820 825 830

Thr Gly Ile Val Asp Ile Ser Ile Leu Thr Thr Gly Met Ser Ala Thr 835 840 845

Ser Arg Lys Arg Lys Glu Glu Leu Ala Glu Ala Leu Lys Lys Leu Ile 850 855 860

Leu Ser Lys Gly Lys Thr Pro Ala Leu Lys Tyr Gln Gln Leu Phe Glu 865 870 875 880

Asp Ile Arg Gly Gln Ser Asp Ile Ala Ile Thr Lys Asp Met Phe Glu 885 890 895

Glu Ala Leu Arg Ala Leu Ala Asp Asp Asp Phe Leu Thr Val Thr Gly
900 905 910

Lys Thr Val Arg Leu Leu 915

<210> 243

<211> 376

<212> PRT

<213> Homo sapien

<400> 243

Met Ala Ala Ala Val Val Glu Phe Gln Arg Ala Gln Ser Leu Leu 1 5 10 15

Ser Thr Asp Arg Glu Ala Ser Ile Asp Ile Leu His Ser Ile Val Lys
20 25 30

Arg Asp Ile Glu Asn Asp Glu Glu Ala Val Gln Val Lys Glu Gln 35 40 45

Ser Ile Leu Glu Leu Gly Ser Leu Leu Ala Lys Thr Gly Gln Ala Ala 50 55 60

Glu Leu Gly Gly Leu Leu Lys Tyr Val Arg Pro Phe Leu Asn Ser Ile 65 70 75 80

s	er	ГÀв	Ala	Lys	Ala 85	Ala	Arg	Leu	Val	Arg 90	Ser	Leu	Leu	Asp	Leu 95	Phe
L	eu	Asp	Met	Glu 100	Ala	Ala	Thr	Gly	Gln 105	Glu	Val	Glu	Leu	Cys 110	Leu	Glu
C,	ys	Ile	Glu 115	Trp	Ala	ГХа	Ser	Glu 120	Lys	Arg	Thr	Phe	Leu 125	Arg	Gln	Ala
L	eu	Glu 130	Ala	Arg	Leu	Val	Ser 135	Leu	Tyr	Phe	Asp	Thr 140	Гув	Arg	Tyr	Glr
	lu 45	Ala	Leu	His	Leu	Gly 150	Ser	Gln	Leu	Leu	Arg 155	Glu	Leu	Lys	Lys	Met 160
A	вp	Asp	Гўз	Ala	Leu 165	Leu	Val	Glu	Val	Gln 170	Leu	Leu	Glu	Ser	Lys 175	Thr
T	yr	His	Ala	Leu 180	Ser	Asn	Leu	Pro	Lys 185	Ala	Arg	Ala	Ala	Leu 190	Thr	Ser
A.	la	Arg	Thr 195	Thr	Ala	Asn	Ala	Ile 200	тут	Сув	Pro	Pro	Lys 205	Leu	Gln	Ala
T		Leu 210	Asp	Met	Gln	Ser	Gly 215	Ile	Ile	His	Ala	Ala 220	Glu	Glu	ГЛЗ	Asp
	rp 25	Lys	Thr	Ala	Tyr	Ser 230	Tyr	Phe	Tyr	Glu	Ala 235	Phe	Glu	Gly	Tyr	Asp 240
S	er	Ile	Asp	Ser	Pro 245	Lys	Ala	Ile	Thr	Ser 250	Leu	Lys	Tyr	Met	Leu 255	Leu
C;	ĀВ	Lys	Ile	Met 260	Leu	Asn	Thr	Pro	Glu 265	Asp	Val	Gln	Ala	Leu 270	Val	Ser
G.	ly	Lys	Leu 275	Ala	Leu	Arg	Tyr	Ala 280	Gly	Arg	Gln	Thr	Glu 285	Ala	Leu	Lye
C	ys	Val 290	Ala	Gln	Ala	Ser	Lув 295	Asn	Arg	Ser	Leu	Ala 300	Asp	Phe	Glu	Ьys
	la 05	Leu	Thr	Asp	Tyr	Arg	Ala	Glu	Leu	Arg	Asp	Авр	Pro	Ile	Ile	Ser

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Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile 325  $330 \hspace{1.5cm} 335$ 

Arg Val Ile Glu Pro Phe Ser Arg Val Gln Val Arg Thr Leu Trp Gly 340 345 350

Leu His Phe Trp Pro Gly Ile Leu Thr Val Ala Thr Ser Leu Pro His 355 360 365

Leu Ser Arg Met Gly Thr His Phe 370 375

<210> 244

<211> 339

<212> PRT

<213> Homo sapien

<400> 244

Glu Ala Leu Gly Ser Leu Gln Pro Thr Cys Glu Ala Val Pro Leu Ser 1 5 10 15

Pro Pro Leu Ser Pro Arg Pro Ala Glu Arg Leu Gln Leu Pro Glu Cys
20 25 30

Ser Gly Asn Gly Ala Thr Gly Ala Thr Gly Gly Gly Thr Arg Gly Arg 35 40 45

Ala Phe Arg Val Cys Val Ser Gly Val Gly Gly Arg Gly Arg Gly Arg 50 55 60

Cys Glu Ser Gly Lys Met Ala Ala Ala Ala Val Val Glu Phe Gln Arg 65 70 75 80

Ala Gln Ser Leu Leu Ser Thr Asp Arg Glu Ala Ser Ile Asp Ile Leu 85 90 95

His Ser Ile Val Lys Arg Asp Ile Gln Glu Asn Asp Glu Glu Ala Val

Gln Val Lys Glu Gln Ser Ile Leu Glu Leu Gly Ser Leu Leu Ala Lys 115 120 125

Thr Gly Gln Ala Ala Glu Leu Gly Gly Leu Leu Lys Tyr Val Arg Pro 130 135 140

Phe Leu Asn Ser Ile Ser Lys Ala Lys Ala Ala Arg Leu Val Arg Ser 145 150 155 160

Leu	Leu	Asp	Leu	Phe 165	Leu	Asp	Met	Glu	Ala 170	Ala	Thr	Gly	Gln	Glu 175	Val
Glu	Leu	Сув	Leu 180	Glu	Сув	Ile	Glu	Trp 185	Ala	Lys	Ser	Glu	Lys 190	Arg	Thr
Phe	Leu	Arg 195	Gln	Ala	Leu	Glu	Ala 200	Arg	Leu	Val	Ser	Leu 205	Tyr	Phe	Asp
Thr	<b>L</b> ув 210	Arg	Tyr	Gln	Glu	Ala 215	Leu	His	Leu	Gly	Ser 220	Gln	Leu	Leu	Arg
Glu 225	Leu	Lys	Lys	Met	Asp 230	Asp	Lys	Ala	Leu	Leu 235	Val	Glu	Val	Gln	Leu 240
Leu	Glu	Ser	Lys	Thr 245	Tyr	His	Ala	Leu	Ser 250	Asn	Leu	Pro	Lys	Ala 255	Arg
Ala	Ala	Leu	Thr 260	Ser	Ala	Arg	Thr	Thr 265	Ala	Asn	Ala	Ile	Tyr 270	Сув	Pro
Pro	Lys	Leu 275	Gln	Ala	Thr	Leu	Asp 280	Met	Gln	Ser	Gly	Ile 285	Ile	His	Ala
Ala	Glu 290	Glu	ГЛЗ	Asp	Trp	Lys 295	Thr	Ala	Tyr	Ser	Tyr 300	Phe	Tyr	Glu	Ala
Phe 305	Glu	Gly	Tyr	Asp	Ser 310	Ile	Asp	Ser	Pro	Lув 315	Ala	Ile	Thr	Ser	Leu 320
Lys	Tyr	Met	Leu	Leu 325	Сув	Lys	Ile	Met	Leu 330	Asn	Thr	Pro	Glu	Asp 335	Val
Gln	Ala	Trp													
<210	0> :	245													
<211 <212		421 PRT													
<213		Homo	sap:	ien											
<400	)> :	245													
	Ala	Ala	Ala		Val	Val	Glu	Phe		Arg	Ala	Gln	Ser		Leu
1				5					10					15	

Ser Thr Asp Arg Glu Ala Ser Ile Asp Ile Leu His Ser Ile Val Lys 20 25 30

Arg Asp Ile Gln Glu Asn Asp Glu Glu Ala Val Gln Val Lys Glu Gln 35 40 45

Ser Ile Leu Glu Leu Gly Ser Leu Leu Ala Lys Thr Gly Gln Ala Ala 50 55 60

Glu Leu Gly Gly Leu Leu Lys Tyr Val Arg Pro Phe Leu Asn Ser Ile 65 70 75 80

Ser Lys Ala Lys Ala Ala Arg Leu Val Arg Ser Leu Leu Asp Leu Phe 85 90 95

Leu Asp Met Glu Ala Ala Thr Gly Gln Glu Val Glu Leu Cys Leu Glu
100 105 110

Cys Ile Glu Trp Ala Lys Ser Glu Lys Arg Thr Phe Leu Arg Gln Ala 115 120 125

Leu Glu Ala Arg Leu Val Ser Leu Tyr Phe Asp Thr Lys Arg Tyr Gln 130 135 140

Glu Ala Leu His Leu Gly Ser Gln Leu Leu Arg Glu Leu Lys Lys Met 145 150 155 160

Asp Asp Lys Ala Leu Leu Val Glu Val Gln Leu Leu Glu Ser Lys Thr 165 170 175

Tyr His Ala Leu Ser Asn Leu Pro Lys Ala Arg Ala Ala Leu Thr Ser 180 185 190

Ala Arg Thr Thr Ala Asn Ala Ile Tyr Cys Pro Pro Lys Leu Gln Ala 195 200 205

Thr Leu Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys Asp 210 215 220

Trp Lys Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr Asp 225 230 235 240

Ser Ile Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu Leu 245 250 255

Cys Lys Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Trp Gly Ala

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254 270 265 260 Gly Ser Leu His Phe Arg Cys Arg Glu Glu Thr Glu Ala Leu Lys Cys 280 Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser Thr 315 His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile Arg 325 Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser Leu 345 Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met Ile 355 360 365 Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala Leu 390 Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn Lys 410 405 Ala Lys Lys Leu Thr 420

<210> 246 <211> 361 <212> PRT

<213> Homo sapien

<400> 246

Tyr Gly Ser Ser Tyr Arg Ala Gly Gly His Leu Ile Leu Trp Val Cys

Ser Met Leu Cys Phe Val Ser Gly Asp Cys Gln Trp Ser Leu Glu Ser 20

Ser Leu His Gln Gly His Lys Leu Ile Leu Val Phe Glu Val Glu Leu 40

Сув	Leu 50	Glu	Сув	Ile	Glu	Trp 55	Ala	Lys	Ser	Glu	Lys 60	Arg	Thr	Phe	Leu
Arg 65	Gln	Ala	Leu	Glu	Ala 70	Arg	Leu	Val	Ser	Leu 75	Tyr	Phe	Asp	Thr	Lys
Arg	Tyr	Gln	Glu	Ala 85	Leu	His	Leu	Gly	Ser 90	Gln	Leu	Leu	Arg	Glu 95	Leu
Lys	Lys	Met	Asp 100	Asp	Lys	Ala	Leu	Leu 105	Val	Glu	Val	Gln	Leu 110	Leu	Glu
Ser	Lys	Thr 115	Tyr	His	Ala	Leu	Ser 120	Asn	Leu	Pro	Lys	Ala 125	Arg	Ala	Ala
Leu	Thr 130	Ser	Ala	Arg	Thr	Thr 135	Ala	Asn	Ala	Ile	Tyr 140	Сув	Pro	Pro	Гув
Leu 145	Gln	Ala	Thr	Leu	Asp 150	Met	Gln	Ser	Gly	Ile 155	Ile	His	Ala	Ala	Glu 160
Glu	Lys	Asp	Trp	Lуs 165	Thr	Ala	Tyr	Ser	Tyr 170	Phe	Tyr	Glu	Ala	Phe 175	Glu
Gly	Tyr	Asp	Ser 180	Ile	Asp	Ser	Pro	Lys 185	Ala	Ile	Thr	Ser	Leu 190	ГÀв	Tyr
Met	Leu	Leu 195	Сув	Lys	Ile	Met	Leu 200	Asn	Thr	Pro	Glu	Asp 205	Val	Gln	Ala
Leu	Val 210	Ser	Gly	Lys	Leu	Ala 215	Leu	Arg	Tyr	Ala	Gly 220	Arg	Gln	Thr	Glu
		_	_					_	_	_	_	_	_		_

Ala Leu Lys Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp 225 230

Phe Glu Lys Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro 245 250

Ile Ile Ser Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln 260 265 270

Asn Leu Ile Arg Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His 280 285 275

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Ile Ser Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu 290 295 300

Ser Gln Met Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly 305 310 315 320

Glu Gly Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr 325 330 335

Glu Ala Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser 340 345 350

Leu Tyr Asn Lys Ala Lys Lys Leu Thr 355 360

<210> 247

<211> 460

<212> PRT

<213> Homo sapien

<400> 247

Met Ala Ala Ala Val Val Glu Phe Gln Arg Ala Gln Ser Leu Leu 1 5 10 10

Ser Thr Asp Arg Glu Ala Ser Ile Asp Ile Leu His Ser Ile Val Lys
20 25 30

Arg Asp Ile Gln Glu Asn Asp Glu Glu Ala Val Gln Val Lys Glu Gln 35 40 45

Ser Ile Leu Glu Leu Gly Ser Leu Leu Ala Lys Thr Gly Gln Ala Ala 50 55 60

Glu Leu Gly Gly Leu Leu Lys Tyr Val Arg Pro Phe Leu Asn Ser Ile 70 75 80

Ser Lys Ala Lys Ala Ala Arg Leu Val Arg Ser Leu Leu Asp Leu Phe 85 90 95

Leu Asp Met Glu Ala Ala Thr Gly Gln Glu Tyr Arg His Leu Ile Leu 100 105 110

Trp Val Cys Ser Met Leu Cys Phe Val Ser Gly Asp Cys Gln Trp Ser 115 120 125

Leu Glu Ser Ser Leu His Gln Gly His Lys Leu Ile Leu Val Phe Glu 130 135 140

	/al L45	Glu	Leu	Cys	Leu	Glu 150	Сув	Ile	Glu	Trp	Ala 155	ГÀЗ	Ser	Glu	Lys	Arg 160
7	Thr	Phe	Leu	Arg	Gln 165	Ala	Leu	Glu	Ala	Arg 170	Leu	Val	Ser	Leu	Туг 175	Phe
2	Asp	Thr	Lys	Arg 180	Tyr	Gln	Glu	Ala	Leu 185	His	Leu	Gly	Ser	Gln 190	Leu	Leu
2	Arg	Glu	Leu 195	Lys	ГÀЗ	Met	Asp	Asp 200	Lys	Ala	Leu	Leu	Val 205	Glu	Val	Gln
3	Ŀеu	Leu 210	Glu	Ser	Lys	Thr	Tyr 215	His	Ala	Leu	Ser	Asn 220	Leu	Pro	ГÀв	Ala
	Arg 225	Ala	Ala	Leu	Thr	Ser 230	Ala	Arg	Thr	Thr	Ala 235	Asn	Ala	Ile	Tyr	Cys 240
					245					250					Ile 255	
2	Ala	Ala	Glu	Glu 260	Lys	Asp	Trp	ГÀЗ	Thr 265	Ala	Tyr	Ser	Tyr	Phe 270	Tyr	Glu
			275	_	_	_		280					285		Thr	
		290					295					300			Glu	
	305					310					315				Gly	320
					325					330					Arg 335	
				340					345					350		
	_	_	355					360					365		Asn	
	Leu	Glu 370	Gln	Asn	Leu	Ile	Arg 375	Val	Ile	Glu	Pro	Phe 380	Ser	Arg	Val	Gln

Ile Glu His Ile Ser Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu 390 395

Arg Lys Leu Ser Gln Met Ile Leu Asp Lys Phe His Gly Ile Leu

Asp Gln Gly Glu Gly Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp

Lys Thr Tyr Glu Ala Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val 435 440

Val Asp Ser Leu Tyr Asn Lys Ala Lys Lys Leu Thr 450 455

<210> 248 <211> 324 <212> PRT <213> Homo sapien

<400> 248

Met Glu Ala Ala Thr Gly Gln Glu Val Glu Leu Cys Leu Glu Cys Ile

Glu Trp Ala Lys Ser Glu Lys Arg Thr Phe Leu Arg Gln Ala Leu Glu 20 25

Ala Arg Leu Val Ser Leu Tyr Phe Asp Thr Lys Arg Tyr Gln Glu Ala 35 45

Leu His Leu Gly Ser Gln Leu Leu Arg Glu Leu Lys Lys Met Asp Asp

Lys Ala Leu Leu Val Glu Val Gln Leu Leu Glu Ser Lys Thr Tyr His 65 . 70

Ala Leu Ser Asn Leu Pro Lys Ala Arg Ala Ala Leu Thr Ser Ala Arg

Thr Thr Ala Asn Ala Ile Tyr Cys Pro Pro Lys Leu Gln Ala Thr Leu 100 105

Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys Asp Trp Lys 120

Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr Asp Ser Ile

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140 135 130

Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu Leu Cys Lys 150

Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Leu Val Ser Gly Lys

Leu Ala Leu Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu Lys Cys Val 190 185

Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys Ala Leu 200 1.95

Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser Thr His 220 215 210

Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile Arg Val 235 230 225

Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser Leu Ile 250 245

Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met Ile Leu 265

Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val Leu Ile 280 275

Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala Leu Glu 295

Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn Lys Ala 315 310

Lys Lys Leu Thr

<210> 249

<211> 263

<212> PRT <213> Homo sapien

<400> 249

Met Asp Asp Lys Ala Leu Leu Val Glu Val Gln Leu Leu Glu Ser Lys 5

Thr Tyr His Ala Leu Ser Asn Leu Pro Lys Ala Arg Ala Ala Leu Thr 20 25 30

Ser Ala Arg Thr Thr Ala Asn Ala Ile Tyr Cys Pro Pro Lys Leu Gln 35 40 45

Ala Thr Leu Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys 50 55

Asp Trp Lys Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr 65 70 75 80

Asp Ser Ile Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu 85 90 95

Leu Cys Lys Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Leu Val 100 105 110

Ser Gly Lys Leu Ala Leu Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu 115 120 125

Lys Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu 130 135 140

Lys Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile 145 150 155 160

Ser Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu 165 170 175

Ile Arg Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser 180 185 190

Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln 195 200 205

Met Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly 210 215 220

Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala 225 230 235 240

Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr 245 250 255

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Asn Lys Ala Lys Lys Leu Thr 260

<210> 250 <211> 215

<212> PRT

<213> Homo sapien

<400> 250

Met His Val Asp Met Gln Ser Gly Ile Ile His Ala Ala Glu Glu Lys

Asp Trp Lys Thr Ala Tyr Ser Tyr Phe Tyr Glu Ala Phe Glu Gly Tyr 20

Asp Ser Ile Asp Ser Pro Lys Ala Ile Thr Ser Leu Lys Tyr Met Leu

Leu Cys Lys Ile Met Leu Asn Thr Pro Glu Asp Val Gln Ala Leu Val

Ser Gly Lys Leu Ala Leu Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu

Lys Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu 90

Lys Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile 100

Ser Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu

Ile Arg Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser 135

Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln

Met Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly 170

Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala 180

Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr 205 195

Asn Lys Ala Lys Lys Leu Thr 210

<210> 251

<211> 161

<212> PRT <213> Homo sapien

<400> 251

Met Cys Pro Glu Asp Val Gln Ala Leu Val Ser Gly Lys Leu Ala Leu 5

Arg Tyr Ala Gly Arg Gln Thr Glu Ala Leu Lys Cys Val Ala Gln Ala 20 25

Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys Ala Leu Thr Asp Tyr 35 40

Arg Ala Glu Leu Arg Asp Pro Ile Ile Ser Thr His Leu Ala Lys

Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile Arg Val Ile Glu Pro

Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser Leu Ile Lys Leu Ser 90

Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met Ile Leu Asp Lys

Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val Leu Ile Ile Phe Asp

Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala Leu Glu Thr Ile Gln

Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn Lys Ala Lys Lys Leu

Thr

<210> 252 <211> 149 <212> PRT <213> Homo sapien

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263

<220> <221> MISC\_FEATURE <222> (6)..(6) <223> X=any amino acid <220> <221> MISC\_FEATURE <222> (8)..(8) <223> X=any amino acid <220> <221> MISC\_FEATURE <222> (10)..(10) <223> X=any amino acid <400> 252 Ala Gly Thr Cys Leu Xaa Leu Xaa Glu Xaa Thr Glu Ala Leu Lys Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile Arg 55 Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn Lys

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Ala Lys Lys Leu Thr 145 WO 2004/052290 PCT/US2003/038829

264

<210>	253	
<211>	166	
<212>	PRT	
<213>	Homo	sapier

<400> 253

Met Leu Val Cys Arg Ile Ala Pro Arg Arg Cys Pro Gly Leu Val Ser 1 5 10 15

Gly Lys Leu Ala Leu Pro Tyr Ala Gly Arg Gln Thr Glu Ala Leu Lys 20 25 30

Cys Val Ala Gln Ala Ser Lys Asn Arg Ser Leu Ala Asp Phe Glu Lys  $35 \hspace{1cm} 40 \hspace{1cm} 45$ 

Ala Leu Thr Asp Tyr Arg Ala Glu Leu Arg Asp Asp Pro Ile Ile Ser 50 55 60

Thr His Leu Ala Lys Leu Tyr Asp Asn Leu Leu Glu Gln Asn Leu Ile 65 70 75 80

Arg Val Ile Glu Pro Phe Ser Arg Val Gln Ile Glu His Ile Ser Ser 85 90 95

Leu Ile Lys Leu Ser Lys Ala Asp Val Glu Arg Lys Leu Ser Gln Met
100 105 110

Ile Leu Asp Lys Lys Phe His Gly Ile Leu Asp Gln Gly Glu Gly Val

Leu Ile Ile Phe Asp Glu Pro Pro Val Asp Lys Thr Tyr Glu Ala Ala 130 135 140

Leu Glu Thr Ile Gln Asn Met Ser Lys Val Val Asp Ser Leu Tyr Asn 145 150 155 160

Lys Ala Lys Lys Leu Thr 165